# A HALF CENTURY OF NAVAL SERVICE

SEATON SCHROEDER

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# A HALF CENTURY OF NAVAL SERVICE

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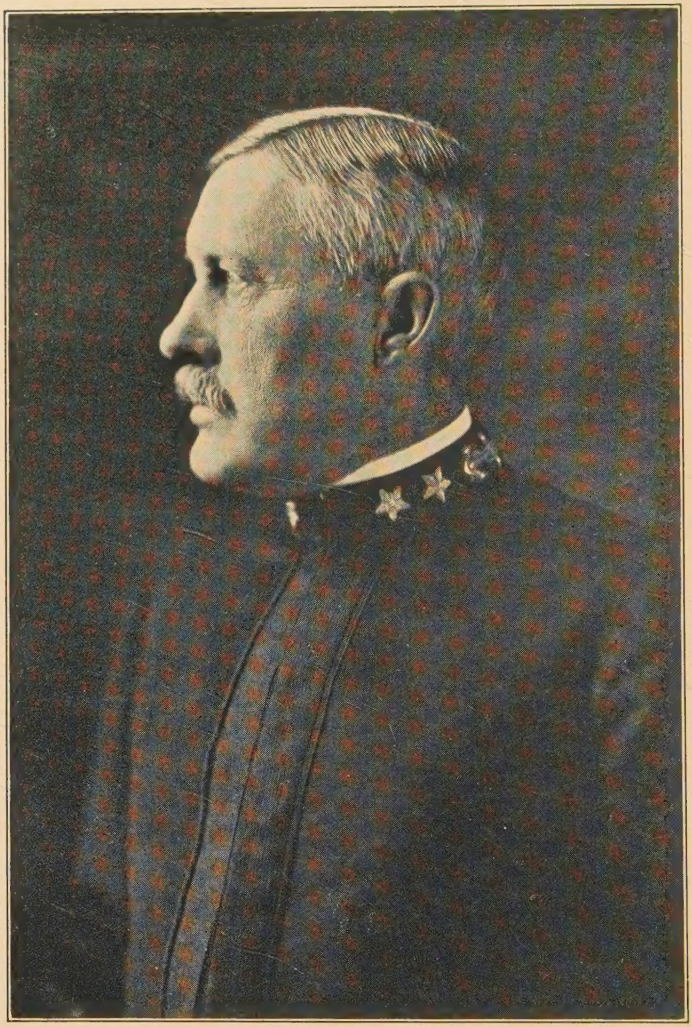

Jeaton Schraeder

# A HALF CENTURY OF NAVAL SERVICE

BY

SEATON SCHROEDER

REAR-ADMIRAL U. S. NAVY, RETIRED

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# PREFACE

The class of '68 in the U. S. Naval Academy entered the naval arena at a time when matters connected with the sea were on the threshold of a great development. During their span of about half a century naval weapons and methods underwent change to an extent undreamed of before. In partial illustration of this are the two photographs in this book of my first ship in 1864, the U.S.S. *Macedonia,* a sailing frigate that had been captured from the British in the War of 1812, and of the battleship, *Connecticut,* my flagship when in command of the Atlantic Fleet prior to going on the retired list in 1911. To take part in the successive steps of material development and keep abreast of professional thought in the employment of the personnel and ever-changing tools; to give proper training and fillip to those coming after, and to maintain their morale and spirit by example even more than by precept; in fine, to preserve the naval tradition,—this has been a satisfying goal for the men of that period, at least during the latter part of it; and, upon laying down their beloved burden, they could do so with the pleasant thought that the great test of a war of wholly new aspect had found the fleet *"Sans peur et sans reproche"* and ready as far as it lay with them to make it so.

Incidental have been the world-wide, varied activities of the silent navy, fostering resourcefulness and adaptability while at times interesting and useful.

SEATON SCHROEDER

WASHINGTON, D. C.,

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# A HALF CENTURY OF NAVAL SERVICE

## CHAPTER I

### MIDSHIPMAN DAYS—PACIFIC STATION

At the Naval Academy—Practice cruises—Cruise to Europe—U.S.S. *Saginaw*—U.S.S. *Pensacola.*

At the time of entering the Naval Academy as a Midshipman, at Newport, Rhode Island, on September 27, 1864, I was a boy of fifteen, having been born on August 17, 1849, in Washington, D.C. My bringing up had been mostly of a foreign nature, ten years of my childhood and boyhood having been passed in Europe. My father, the Honorable Francis Schroeder, was appointed in 1849, shortly after my birth, American Minister to Sweden and remained in Stockholm eight years. Later, after a year or so at home, we lived in Paris for two years, then made Newport and New York our homes.

My father and his father were natives of Baltimore, the latter being of German and Danish ancestry. My father's mother was also a native of Baltimore, of Breton parentage, the Ghequieres. My mother was a Washingtonian, daughter of William Winston Seaton, who, with his brother-in-law, Joseph Gales, owned and edited the *National Intelligencer* during about fifty years and who had been elected Mayor of the city ten times. The Seatons and Galeses were of Scotch and English descent respectively, the forebears migrating to America at various times between 1670 and 1785.

With the exception of two winters in school in New York, my education had been by home and private tutoring. I was well advanced in mathematics, as also in various other branches of less apparent value in the profession chosen for me with my hearty concurrence. As a matter of fact, it would have been easier for me to pass into the third class than to enter the fourth; had that been so arranged it would have led to my being considerably more advanced in rank during the latter part of my service. But friends of the family urged that it would be better for me to go through the whole four years' course, and I am well content and proud to have been associated then and in succeeding years with that class of '68, for it was a fine body, and several of them achieved special distinction in various ways. We entered one hundred and sixty-three strong, including forty-four of the class ahead who had been so unfortunate as to fail in the annual examination and were put back into our class. We graduated seventy-nine, I being number fifteen. Two serious illnesses in consecutive years, including scarlet fever, handicapped me considerably; without them, I might have given my classmates a better run for their numbers.

The simple life and simple food developed us all very well physically. Both life and food were simple enough in all conscience, particularly as compared with the luxurious conditions of to-day; that situation exists in all walks of life, though perhaps not in quite so marked a degree as there. The food was much better when the Academy was moved back, in 1865, to Annapolis, from whence it had been transferred to Newport in the beginning of the Civil War. At both places the two junior classes lived on board ship, two old sailing vessels being used for the pur-

pose moored alongside a pier for convenience. There was much to commend that plan at that time; but it would be impracticable now, partly because of the great number of boys to be trained. One of those ships was the *Constitution,* of heroic fame, and I think her presence led many to read her history who would otherwise have remained without that thrill.

Any one visiting the Academy at Annapolis now could not easily picture a description of it as it existed in those days. The old grounds were of much less extent than the present ones, and, with the exception perhaps of the Herndon Monument, there is hardly a landmark by which they can be connected. The Midshipmen who were quartered on shore had rooms in five substantial brick buildings of an old conventional type built in a row down in the lower part. There were two or sometimes three in each room, with small iron bedsteads and bureaus of simple but substantial make. There were no bathrooms attached, but the various sections were marched on stated evenings down to well-arranged baths constituting a building on the water front. Cleanliness was not so luxurious then as now; nor was it so difficult to maintain. In front of these buildings, where Bancroft Hall now stands, was the parade ground for infantry and light artillery drills and baseball. A big tree which could not be cut down because it was a landmark for navigating the approaches to Annapolis stood near the middle of it; it was not much in the way, however, and was actually regarded with something akin to veneration; it also offered a field for competition in throwing, Jim Carlin, our short stop, being, I think, the only one who could throw a ball over it from the walk along the buildings.

Fort Severn, an old, circular redoubt originally

used as a battery for target practice, but with the guns removed and roofed over, was made into a gymnasium and ballroom; with the latter use in particular view the ceiling was painted a sky blue with numerous gilt stars, and it bore a fascinating scroll with the words, *"Dieu et les dames."* Then there was Fort Pat; this was simply a large mortar mounted by itself on the lower sea wall. The peculiar name was simply a tribute to the Senior Instructor in Naval Gunnery, Infantry Tactics and Howitzer Drill, Lieutenant Commander E. O. Matthews, who in some way had come to be known entirely as Pat Matthews. The origin of that name was lost in the mist of midshipmen's fancies.

The climate of Annapolis was far better than that of Newport for carrying on drills and out-of-door sports during the winter months, and in the summer we were at sea in the practice ships. Our class did very well in athletics; in the Second Class year our boat's crew (Ingersoll, Drake, McLean, and Doty) won the championship over the First Class, and our baseball nine did the same. In our first class year we retained both championships over the second class. I managed to work up to being first supernumerary of the first nine, third base preferred; but I never had opportunity to play in any important match.

The officers of the Academy were a brilliant group, beginning with Vice Admiral Porter, who became Superintendent in 1865. The Commandant of Midshipmen, also Head of the Department of Seamanship, was the renowned seaman, Commander S. B. Luce; he it was who, after a long service of great distinction, consummated his ambition by being the founder and first president of the Naval War College, the institution which blazed the way and set the

U.S.S. MACEDONIA, 1864

pace for other navies, and, under the guidance of its several, eminent presidents and the painstaking work of its staff and classes, has of late years been of well-nigh incalculable value to the Navy and the country in its studies of the art of war and the proper activities of the fleet.

The curriculum was in the very early stages of a process of development, and a retrospective view of it brings out some curious anomalies, as is apt to be the case in any review of the past. The class ahead of ours had Moral Science; we escaped that but, strange to say, were given practically no instruction in surveying. We had international law, and it remained a humorously bitter pill for me that upon one occasion I was awarded a zero on a case that my father had had in hand while Minister to Sweden during the Crimean War. Familiarity with surveying had to be acquired afterwards in service, as the Navy did a good deal of it in those days. Personally, having fluent command of French, I was excused from all recitations in that language and was given lessons in Spanish instead, which was of some use to me later.

In seamanship and navigation we were well grounded in practice as well as in theory, our ratings on board ship during the summer cruises and while at anchor in the stream in winter being so graded from year to year as to give experience in all duties. On the first cruise, on board the *Macedonian,* I was main royal yardman, looser and furler, and had to run up and down the rigging many times a day. On the second cruise I was a boatswain's mate, taking pride in the skillfull piping of the boatswain's whistle, while also trying to emulate the hoarse calls of an old sea dog. Finally, in the summer of 1867,

when the practice squadron sailed over to Europe, the members of our class were permitted to "take the deck" under the supervision of an officer, with occasional detail as Assistant Navigator.

The cruises off our coasts were not junketing trips in any sense for us midshipmen; while at sea it was constant tacking, wearing, box-hauling, reefing, shaking out reefs for the benefit largely of the senior classmen, and making and furling sail and marlinespike seamanship for the third and fourth classmen. In port it was much the same for us youngsters with the addition of bending and unbending sail, sending down and crossing the light yards and, in bad weather, working navigation problems. There were also gun drills; but in those days gunnery had little attention. The guns were 32- and 64-pounders on wooden carriages; "side tackles" were fitted to run the gun out and give it proper train for firing, and a "train tackle" for running it in for sponging and loading when not driven in by the recoil in actual firing. For actual firing a half hitch was taken around all parts of the train tackle to jerk it out of the way of the recoil. This duty fell to my lot as train tackleman on our first "general quarters with powder." I remember well that I was so impressed with the necessity of getting both myself and the train tackle out of the way that I took an unnecessarily long, backward step with it, resulting in my left leg going down a powder scuttle and striking a wobbly something which proved to be the head of one of the powder division on the deck below.

Gardiner's Bay, at the east end of Long Island, was the principal drill ground, with visits to several New England ports. To the wholesome, perhaps, but rather unappetizing rations on these cruises we owed

a greater appreciation of many things easy to get on shore but unknown at sea. Once we put in at Boston for a few days, and from a bumboat woman who came alongside with pies and cake, I bought and drank a quart of milk of which I have been fond ever since, though I had never cared for it before.

The cruise to Europe of the three sailing ships in squadron formation in 1867 was quite an event. The flagship was the *Macedonian,* of 1856 tons displacement, commanded by Commander Luce who also acted as flag officer of the squadron. Another ship was the *Savannah,* slightly larger. My ship on this cruise was the *Dale,* full ship-rigged though of only 675 tons. In light airs she could waft more easily than the other two, larger ships, but in a fresh breeze they would "spare" her several sails to keep in company. Nevertheless, we made the passage to the English Channel in formation in nineteen days, which was very good work.

Our first port was Cherbourg where we clewed up and furled in very seamanlike manner, as we were assured by visitors. I little thought then that forty-three years later I would bring a fleet of battleships into that same harbor.

We were all given four days' leave to go to Paris, and I had the very pleasant opportunity to revisit the scenes of my boyhood of seven years before. It was still the period of the Second Empire and I had occasion to recall my boyish adoration of the beautiful Empress Eugénie as she would be seen driving up the Avenue des Champs Elysées with the Emperor and with the superb *Cent Gardes* riding before as escort. The great exposition of that year was also open to the gay throngs, but I felt less interest in that than in visiting the scenes of my for-

mer associations. I found little change there, much less than eleven years later when I chanced to have the opportunity to visit the city again during the exposition of 1878.

There were several United States' ships in port, including the *Franklin,* flagship of Admiral Farragut who had just relieved Rear Admiral L. M. Goldsborough in command of the European station. Among the French vessels was the imposing ironclad frigate *Magenta,* with her numerous broadside battery of rifled guns. We knew of the great work done by our monitors in the Civil War, the name of Ericsson's first creation being applied to the type; one was in service at Annapolis. As all their work in war had been in the smooth waters of rivers and harbors, it was perhaps only natural that their utter inability to fight in a seaway had not been brought into view. They, therefore, remained in favor, and it was some years before we recovered from that obsession. Of really seagoing ironclads, therefore, we knew only by hearsay, and the comparative majesty of the *Magenta's* appearance was quite impressive. For some years after the Civil War also there was a controversy in our country as to the superiority of the smashing effect of large, slow-moving, spherical shell from smoothbore guns or the penetrating power of rifle shell of smaller caliber and higher velocity. Actual discussion of the subject, however, had scarcely begun at the time we are speaking of; in the lethargy in naval matters that continued for so long after the ending of the war there was no searching thought given to the subject and we simply continued the manufacture and use of the weapons which had served their purpose. As the drill was the same for one caliber of gun as for another, it is not

to be wondered at that no great expense was incurred in perfecting the battery of a little sailing ship that could not possibly serve in war, although well-enough adapted for training purposes. So it happened that the little *Dale's* broadside comprised one 8-inch smoothbore with 32-pounders on either side; and, although that 8-inch was of very low power, it loomed so large in contrast with its immediate environment that we had a saying that if it were fired it would start its little companions.

During the squadron's stay in port the Empress Eugénie arrived in the Imperial yacht, occasioning a vast amount of enthusiastic demonstration in the way of gun salutes, and dressing ship and illuminating ship at night. On July 27 the Empress visited the *Franklin,* upon which occasion all the American ships manned yards and cheered ship in conjunction with the French ships. The rapid rolls of heavy gunfire from the *Magenta* were peculiarly striking, though we thought the slow, regulation, 21-gun salutes fired by the *Macedonian,* the *Savannah,* and others were very dignified. At night the French ships were brilliantly illuminated, and the Americans dressed ship with lanterns at the yardarms, burned blue lights and fired rockets.

The time soon came to get under way and make sail again. A short visit was paid to Portsmouth, England. Then the homeward voyage was begun. The squadron was kept in formation for some days after which the ships were dispersed to make the passage on different sailing routes. Before separating we were becalmed at times, and upon one occasion we had an opportunity to notice what seemed to be a positive attraction between ships motionless in the water; we actually had to get out our boats and

turn our bow away from the *Savannah*. The fact that that ended the danger seemed to disprove the old idea of the mutual attraction of wooden ships and to confirm the simple belief of experienced seamen in the importance of keeping a ship headed toward a fleeing enemy in a calm, the bellying and slatting of the sails caused by the motion of the ship in the ocean swell making her to forge ahead rather than astern, the lines being finer forward. Later, when alone in the doldrums, taking the southern passage, we learned that the sea could be so calm that there was not even any bellying and slatting of the sails with consequent motion ahead. In one twenty-four hours we made two miles, by astronomical observation. We got out the boats one day and tried towing but gave it up after a few hours. With such weather it is not to be wondered at that we were forty-nine days on the passage from Portsmouth to Hampton Roads.

Some eight hours of that time, however, were passed in Funchal, in the Madeiras—a pleasant, little break. Our executive officer, Lieutenant-Commander E. O. Matthews (Pat), was a canny mortal; the wind failed us as we approached the island, and the shore is so steep that it seemed that we would not be able to fetch an anchorage; he thereupon told the Portuguese bumboats that were swarming around with fruit and various things for sale, that if they would tow us in to an anchorage depth they would be allowed to sell their wares. They got a long rope as if by magic, and by dint of hard pulling soon got us in. Their fresh fruit and vegetables tasted wonderfully good. Viewed from the offing the island looked most attractive with its rugged peaks and precipitous cliffs; upon closer acquaint-

ance such little out-of-the-way places had a fascination all their own, in those days of limited world intercourse, the peculiarities of dress and manners and customs and mode of living being replete with interest.

We were given permission to go ashore for a few hours, and we found real sport in sliding on sledges at break-neck speed down a steep, smooth, cobble-paved street, a matter of every-day traffic from the upper to the lower part of the town. It is needless to say we spent what little money we had left over from Paris on articles of embroidery and wicker-work; the officers profited by the opportunity to take home some of those fine wines, but that was something far beyond a midshipman's resources.

That homeward voyage took so much longer than we expected, that we ran short of water and all hands were put on half rations. Preparations were made to catch any rain that might fall, but none came, except one little shower one night which did not amount to anything. The officer of the deck and I profited by it, however, to the extent of pounding down a long hollow in the painted hammock cloth and collecting a couple of glasses full which we drank in glee. The situation had not yet become serious, but it *was* a situation. The amount used was indeed small; a full allowance in those days would be far less per man than even quarter rations to-day. The tin cup provided at the scuttle-butt for us all to drink from was filled up to within about an inch and a half of the top by a plug of wood, so that no one could from carelessness draw more than he wanted and waste the rest.

At last we heard the boatswain's joyous pipe and call, "Bend Cables!" The next day we clewed up

and furled in Hampton Roads, and we midshipmen went on leave of absence considerably chagrined at the shortness of the time left before having to report again at Annapolis on October 1.

That was the last practice cruise of our class. We were given our diplomas of graduation in June, 1868, and were available for service where ordered. Before being dispersed, however, we put to sea in the same practice squadron and sailed to New York harbor, where all three ships were towed up to West Point with a view to establishing an *entente cordiale* with our *confrères* of the Army. It was a quite gay week or so there, we watching and applauding the cadets' various drills on shore, and they doing the same, I suppose, to our sail and spar drills. The last function was a grand ball given on board the ships; the *Macedonian* and *Savannah,* moored and lashed together stern to stern, gave good dancing room, and the little *Dale,* lashed alongside breaking joints, was equipped as a supper room. With deck lanterns and battle lanterns, flags and bunting, pistols and cutlasses, and muskets and bayonets, a brilliant and attractive scene was produced. Every one was in a jolly humor. Furthermore, a pleasant sense of comradeship with the Army was established.

Then our class went on their various ways, still midshipmen, but eligible to duty anywhere after a leave of absence. Some of us have never met since; and those still alive and in the service are few in number. Some left the service before many years; of those some achieved distinction in civil life but they always kept in touch with the members of their class and retained a place in their affections. Distinguished among these is Colonel Robert M. Thomp-

son (Bobby), a true and active friend of the Navy and beloved by his classmates.

My first duty after leaving the Academy was on the Pacific coast. Ordered out there in September, 1868, it took nearly four weeks to reach San Francisco; the railway across the prairies was not completed, and we went by steamer down to Aspinwall, then across the Isthmus by rail to Panama, and up by steamer on that side. There were some half dozen other midshipmen traveling under similar orders, and we had our first glimpse of tropical verdure, fruits and savagery in crossing the narrow strip still "in the wild." Now, of course, no visitor to the Canal Zone can form any idea of the impressive tranquility reigning between villages along the narrow thread of that railway before any very serious thought had been given to a canal.

At last, after touching at several Mexican ports, we reached the Golden Gate and passed into the harbor of San Francisco. That unfortunate city had very recently passed through the ordeal of an earthquake which, however, seemed to have been less destructive than was thought from the accounts that had reached the eastern states shortly after our departure. The principal shock to me was the fact that the ship to which I had been ordered, the steam sloop of war *Lackawanna,* was not in port, and the consensus of such naval opinion as I could get at was that no one knew when she would arrive. So for some time I was thrown on my own resources, which were slender; their slenderness was considerably aggravated by a peculiar condition that existed at that time. The legal currency of our country was still paper money—greenbacks as they were called. Gold was at a premium of about 33⅓ per cent. But

the good people of California would have none of the greenbacks, for gold and silver were the currency there. The Navy, therefore, while in the harbor of San Francisco and other towns of the State, drew their pay in greenbacks and spent it in gold, suffering a loss of about a quarter of it. Midshipmen will have their joke; but the nearest approach to a joke on that subject was the comment that to compute 75 per cent of a midshipman's pay would require the use of logarithms.

However, I had letters of introduction to a few people in the city who were very hospitable, and the time passed quickly enough. Some of my friends would have been politely surprised had they happened to drop in at some rather obscure restaurants and read my dinner orders.

After a few weeks, Commander Richard W. Meade, Jr., who commanded the *Dale* in the Naval Academy practice cruise to Europe in 1867, and of whom all midshipmen stood greatly in awe, arrived under orders to command the U.S.S. *Saginaw* for service in Alaskan waters. At his suggestion I was ordered to his ship; and on December 1 we proceeded north, touching at Victoria, Vancouver's Island, and passing through Queen Charlotte Sound to Sitka.

The *Saginaw* was a quaint, little, wooden, paddle-wheel gunboat of 453 tons, carrying six small guns. She was actually not much smaller than the *Dale,* but, with her fine lines and the space taken by boilers and engines and coal bunkers, she was very different, and seemed particularly small to any one who had just made the passage from New York to the Isthmus, then to San Francisco in the big steamers

of the Pacific Mail Company. I was a regular deck officer and had charge of a division (one gun!).

Captain Meade was a well-known, daring, and skillful seaman, devoted to the exercise and inculcation of his profession. While naturally kind of heart he was apt to be disconcertingly frank in both look and spoken expression whenever any one incurred his displeasure or failed to meet his professional expectations. Although our vessel was small, there were not a few occasions of danger on which Captain Meade showed a calmness and an unruffled judgment that could not fail to impress those about him; it was only on comparatively trivial subjects that he sometimes lost his temper. It was a good school to be under his command, and personally I retained a very friendly regard for him.

I was the only midshipman on board, and I stood watch in three watches with two ensigns who had been in the class ahead of mine at the Academy. One of these was Ensign John Elliott Pillsbury, with whom I became very intimate before the end of the winter; a friendship that continued all through our lives until his death in 1919. A man of strong character, attractive personality, and great professional ability, he achieved in time marked distinction, notably by his studies of the Gulf Stream while in command of the coast survey steamer *Blake,* and, later, by his presidency of the National Geographic Society after retirement as a rear admiral.

The long nights and short days, and the fact that Sitka is one of the rainiest places in the world outside the tropics, did not make for cheerfulness during that winter cruise. In the little wardroom there was just room for us to squeeze in around the mess table, but we did have a little coal stove in a corner.

The cold was not bitter in the sense that the term is used on the Atlantic coast, for, as is well known, the Kuro Siwo, the warm Black Stream of Japan, which crosses the Pacific Ocean much as the Gulf Stream crosses the Atlantic, tempers the climate of the Alaskan coast south of the Aleutian Islands, bringing warmth and moisture to that shore. The thermometer rarely fell below 30 degrees; but the almost incessant rains, or snow, or sleet, and the frequent squalls and gales, made it extremely uncomfortable on board so small a vessel; there were not a half-dozen pleasant days during the winter we spent there.

We three watch officers, of course, never had "an all night in," except when the executive officer occasionally would take a watch, a rigid watch being kept day and night. We also maintained a stiff schedule of drills, with "great guns," small arms and single sticks. Once we actually had target practice with a detached rock for a target. I was greatly amused afterwards upon reading in the log the Captain's characteristic comment in his own handwriting: "In the opinion of the commanding officer the firing was miserable except the forward 30-pounder rifle under charge of Midshipman Schroeder." I tried to smooth that over at mess by saying that "it was not that my gun did so well but that . . ." But that did not help matters much.

A typical instance of the Captain's restless activity occurred one night when I had the midwatch, the ship being at anchor in a secluded bay. At about one o'clock he suddenly appeared on deck, commented with me upon the moon actually shining and some stars being out, and, after some thought, said:

"Get your sextant, sir, and measure the lunar distance of that star" (pointing to one), "assume the latitude and longitude of this anchorage, and deduce the moon's altitude." That was reversing the process and object of computation of any observed lunar distance, and all my hours off watch for several days were passed in struggling with it. As for the result, I can remember only that it was very, very different from any possibly correct answer.

While we got to be somewhat "on springs" as a result of practically no relaxation, there were occasional signs of lethargy on the part of those called for their four hours of monotonous night vigil; the officer who was generally my relief seemed to be rather exceptionally affected that way and was often slow in getting up, much to the indignation of the sturdy old quartermaster to whom it generally fell to call him. One night when he had been called a second time for the midwatch and had not appeared by half-past twelve, I asked the quartermaster if he were sure he had awakened him, and he replied emphatically that he was. A little while afterwards I said to him: "Daniels, why are you sure that you woke Mr. B——?" He looked me squarely in the eye by the dim light of a deck lantern and, without a suspicion of a smile, answered simply: "I lifted him out of his bunk, sir, and laid him on the mess table."

Salmon and other fish and venison were cheap and plentiful, and we occasionally enjoyed bear's meat. Contrasted with the usual fare on board ship away from large towns in those days, our table could not be the subject of complaint.

All in all, it was not so dreary as one would think. One of the mess said one evening: "This is not par-

ticularly gay; but in years to come we will look back on the good old times aboard the little *Saginaw.*" The framer of that sentiment was several years older than most of us, and we cheerfully echoed the dictum, and in later years we realized that he was right; time mellowed the outlook.

What really saved the situation in the matter of spirits was the activity of the ship under the restless energy of Captain Meade. Just a year had passed since the United States had acquired the territory from Russia, and it was important to let the inhabitants of the few scattered villages see the American flag and learn what it meant. Some of the tribes of Indians, or Siwashes, in that sparsely inhabited region were restless, too, and several times our little guns had to do more than send a warning that white traders must not be molested. On New Year's Day there was trouble in the Sitka village, adjacent to the Army post, and we had to blockade it for a while. A charge of shrapnel drove back some canoes at one end of the settlement, and all that night our picket boats were out while we stood watch and watch at the guns, the broadside having been sprung to bear. After some days they quieted down.

A more serious situation arose a few weeks later. On February 11, the bodies of two white traders, who had been killed by the Kake tribe, were brought in in a canoe by friendly Indians. We returned to Sitka and embarked a few soldiers from the post there, in case a landing should be needed. With a crew of only fifty-four, after taking out the engineer and fire-room force, there were not many men left for landing parties. On February 15 we reached Saginaw Bay, some distance northward, and opened fire on the Kake village where the murders had been

committed; then a boat with an armed crew was sent in with the soldiers and destroyed four houses and six canoes. In the afternoon the same was done to a Kekou village on Kuprianoff Island. On the next day another Kake village was shelled and afterwards destroyed by a landing party. Later two boats with armed crews were sent several miles up an inlet to destroy a stockade.

There was but little trouble after that; the certainty of prompt retribution prevented these savages from committing excesses and saved them from the consequences.

The scenery, though given hasty and somewhat preoccupied attention, revealed impressive beauties in the rocky shores of islands and coast with their remarkable cliffs, the occasional blue glint of a glacier, dense woods, and the deep water, dark and still except in narrow passages where, under the compelling force of great tides, foaming swirls betray the rapids. It should make a pleasant theme for the summer people who have taken to visiting that region in increasing numbers during recent years and whose opportunities are more favorable, what with long daylight and pleasant weather and sightseeing as an occupation. We went as far north as latitude 60 degrees, often making our way rather blindly because of the lack of charts and sailing directions. One fortunate thing was that the shores are generally bold and steep, too—in many parts you can go close alongside anything above water, and Captain Meade's boldness in acting accordingly was remarkable. One night we tried to reach, before nightfall, what seemed on the chart to be a small indentation called Port Houghton, where we thought there might be anchorage depth. The position was not correct

on the chart, and it was pitch dark when we pointed in where there seemed to be a recession of the coast. The leadsman kept the hand-lead going with "no bottom at twenty-one fathoms," until, the ship's way being stopped, the long deep-sea lead was tried. That leadsman, being evidently something of a wag, gave his song: "And a quar-r-r-ter eighty one." At almost the same moment the lookout forward reported "a rock or somethin' under the bow." Then we quickly backed out, and steamed all night through Stephens Passage into Prince Frederick Sound.

There was a pilot on board whose knowledge was very useful in most of the passages that we navigated, though of some he had only a general idea. He was supposed to be familiar with the tidal currents which in some places are very swift and concerning which no data were available to strangers; but his knowledge in that direction played him false once and we got into a very serious box. It was at a place called Peril Straits—very properly named. I am sure the Captain would have waited for slack water had he known how tremendous a current he would be stemming soon after entering the strait. We began to go slower and slower with every possible ounce of steam at work until at last we became virtually stationary with the engine going at full speed. Then the chief engineer came up and I heard the Captain tell him to allow a steam pressure two pounds higher than officially authorized; soon a little breeze came up astern and we quickly set the topsail and hoisted a squaresail which, in technical parlance, was set "flying" at a yard on the foremast. And so we scraped through, I daresay to the relief of the Captain's mind, though there was no sign of his having given any particular thought to it. There

is a bend in that strait, and if the machinery had failed we would almost inevitably have gone on the sharp rocks lining the shore and quickly broken to pieces. For the same reason to attempt to drop down by reducing speed seemed entirely impracticable. I do not know what Captain Meade said to that pilot in the privacy of the cabin afterwards.

While those little paddle wheels churned their busy way through the labyrinth of channels, fuel to keep them going was sometimes scarce to an interesting degree. In Mitchell Bay, in the Kootznahoo archipelago, a small, abandoned surface mine was discovered and working parties comprising nearly every one on board, supplemented by some Indians, exploited it, with such crude means as could be devised. Incidentally that coal was so young, with streaks of apparently pure fossil resin, and burned so fiercely, that it fired not only the boilers but the ship as well—the woodwork around the base of the smoke pipe catching fire several times. Upon other occasions, as a last resort, we were compelled to get wood cut at one of the villages; this was stacked up on the quarter-deck and forecastle and used to supplement what little coal was left in the bunkers. It is possible that it did help a little toward reaching places where we could get coal, but it was so green and so soaked by the rain that the steam fell perilously low at times.

Take it all in all those months were quite prolific in experiences which tended to stimulate resourcefulness. We had but little friendly intercourse with the natives and managed to pick up only a few words of the Chinook jargon that served as a means of communication between them and the traders. The expression that seemed to find most favor with us

was (phonetically): "Myka tikki Klotawa cop'ilihi okuk poly-kely" (I wish to go on shore this evening). Americans were known as "Boston Man," to the pretended astonishment of all except Pillsbury who was from that part of the world and maintained that it was only a natural tribute to the culture and preëminence of that city.

Amid such scenes the months slipped by, and when spring came the *Saginaw* was ordered back to San Francisco and nearly all the officers were transferred to other ships.

Within eighteen months afterwards I was shocked to hear of that little ship's untimely end—stranded upon Ocean Island Reef away out in the Pacific. Captain Meade had been detached and relieved by Lieutenant-Commander Montgomery Sicard who was executive officer of the *Pensacola* when I reported on board and he had been relieved by Lieutenant-Commander S. D. Greene, well known as the executive officer of the original *Monitor* in her celebrated fight with the *Merrimac.* At the time the *Saginaw* was wrecked, I was on the Asiatic station, and it was not until some months afterwards that we learned of the desperate struggle for life on that waterless island and of the heroism of Lieutenant John G. Talbot and his four men who sailed and pulled the little whaleboat over one thousand miles to get succor from one of the Sandwich Islands, as the Hawaiian Islands were then called. Two of that boat's crew, I remember well; they were both drowned in the breakers when attempting to land, as was also Lieutenant Talbot. Of the two who succeeded in landing, one was by that time insane and died soon after. Fortunately the coxswain, William Halford, was able to tell the tale, and a vessel was sent to rescue

those left on Ocean Island, among whom were three of my classmates. I remember that little four-oared whaleboat very well, and also a clever little distiller that they managed to salve; it was a simple coil of steam piping outside of the hull of the ship but inside the starboard paddle box and deluged by the spray when the wheels were turning, the steam being thus condensed and the water collected in buckets in the gangway.

Upon detachment from the *Saginaw* I was ordered to the *Pensacola,* flagship of the North Pacific fleet. This was a steam frigate, full ship-rigged, of 3,000 tons displacement, mounting eighteen guns of the standard IX-inch, smoothbore type and two 60-pounder rifles. She seemed very large after the *Saginaw;* but my duties were proportionally diminished in importance, my station being that of Midshipman of the Foretop at "All Hands," with watch duty as Officer of the Forecastle at sea and Gentleman of the Watch in port. I was also Captain's aid, and after a few weeks, when Rear Admiral Thomas Turner hoisted his flag, I was, in addition, detailed as barge midshipman. Admiral Turner had a sense of humor all his own. He had a handsome red setter, and he declared that that dog ranked with a wardroom officer. That, of course, fixed the standing of us midshipmen in the steerage; and, in due obedience to the regulation that juniors always get into boats first, I made a point of always getting into the barge before that dog upon all occasions when the Admiral used the boat. The duty had its attractions, however, and I was glad to have it.

The captain of the *Pensacola* was George Henry Preble whom I held in great esteem for his uniform kindness and consideration. All the more have I felt

a little ashamed to remember one prank of mine. Captain Preble had the pleasant custom of inviting the midshipman of the morning watch to breakfast; and, besides enjoying a quiet talk with an older and experienced officer, I found his table vastly more satisfying than that in the steerage, as the Junior officers' quarters were called in those days, and was always glad to profit by his invitation. There was one midshipman, however, who apparently disliked the Captain and vowed, upon learning of the hospitable custom, that he would refuse to go. I urged him not to act in that way as it would be foolish and disrespectful, but he was firm. So, in order to shield him from the consequences of such folly, I called the Captain's steward who would hunt up the midshipman in the morning watch to convey the invitation, and told him that whenever Mr. W—— had that watch I would be the one to be asked; and the veteran steward carried out the plan. I never had any reason to suspect that Captain Preble noticed that I breakfasted with him twice as often as any of the others. He remained always most kind; and some years later when he was a flag officer and I a Lieutenant, I heard that, upon taking command of one of the squadrons, he looked about for me to invite me to join as his flag lieutenant, but I was on a distant station and not available.

We saw quite a little of the French frigate *L'Astrée,* Captain Peyron, and my knowledge of French stood me in good stead.

Shortly after I joined, the *Pensacola* cruised down along the Mexican coast, touching at San Blas, Mazatlan, Manzanillo, Acapulco and Pichilinque. The stay in each port was too short to afford any opportunity of noting the manners and customs of the

people other than the boatmen and their ilk. We arrived at San Blas on May 2; on May 3 a kedge was gotten out and the broadside sprung to bear seaward, and we held great gun target practice; on May 4 we sailed again. It was pretty hot, particularly to one who had been passing the winter in Alaska; but the freshness, cleanliness and comfort of that big ship, in a dry climate, were a pleasant contrast with the conditions in the *Saginaw*. Even the drinking water was better, the necessity and methods of proper aeration being better understood. Much credit for this was given to Chief Engineer Edward D. Robie, a former Fleet Engineer, as evidenced by a song ending with the refrain:

"We'll fill up our cups of ado-obe
With water as pure as a rill;
And we'll drink to the health of old Robie
In water, pure water, distilled."

At Pichilinque it was so hot, with the ship always riding head to wind, too, that a kedge anchor was carried out each morning to spring the ship broadside to the prevailing light breeze so as to get the air through the gun ports and air ports. The Admiral's cabin had ports on both sides, under the poop deck; and so had the Captain's on the main deck. It made no difference, therefore, to them which broadside was sprung to the breeze. As the Executive Officer's room was on the starboard side naturally he got out the kedge on that side; and that was all right, for the Midshipmen's steerage was also on that side. Sharks infest those waters, so no swimming was possible. Altogether it was simply hot and uneventful

and, after a couple of months, we welcomed the return to San Francisco and a short cruise in the latter part of the summer to Puget Sound.

On the passage up the coast north of San Francisco, on the afternoon of August 7, we had the rare opportunity to see an eclipse of the sun at sea. It was so clear, that the gradual darkening was very impressive until the quiet was broken by the officer of the deck giving the orders: "Station the deck lookouts; get out the running lights!" "Lay down from the masthead!" Later, as the moon passed off and a seeming dawn replaced the shadows of night, there was a ripple of laughter as a rooster forward clapped his wings and gave his salutation to the morn. Then came the orders: "Relieve the deck lookouts; take in the running lights!" "Lay aloft, the masthead lookout!"

Next to that eclipse the things that remained most clear in my memory were the great number of whales we saw spouting off the coast and the dense clouds of smoke and fine ashes produced by the forest fires, that enveloped the ship for days at a time while in the Sound. Twice the good ship grounded; but she was gotten afloat again without injury. The towns that we touched at were Esquimault in British Columbia, Steilacoom, Olympia, and Port Townsend; but our stay at each was short. We had a few baseball matches with the people on shore with varying results. Our nine could not be considered one of average players; there were four or five very good ones fresh from the Academy, but some of the rest just had to be used to fill up. After losing two games we decided to invite two seamen on the nine, and after that we had better luck.

Upon arriving at one port, Olympia, the wardroom

conceived the idea of having a little social dissipation one afternoon. A committee of two officers from the wardroom and myself, representing the steerage, went on shore early in the forenoon and called at all, or nearly all, of the nicer-looking houses and left an invitation to the inmates and their friends to a dance on board during the afternoon. In the meantime, energetic work was pushed in decorating the quarter-deck with flags, and by three o'clock the ship presented a very attractive appearance. The style of invitation was perhaps novel, but it "took" and we had a jolly dance. I was not in those waters again until thirty-nine years later, and upon that occasion I did not go to Olympia. It would have been interesting to find out if the oldest inhabitant had any recollection of our visit which certainly was pleasant enough for us to remember well.

That was a good, taut ship, and well kept. It seems strange now to hark back to the drills, with those guns mounted on broadside carriages and the possible incidentals of battle, the tricing up the boarding nettings, the springing the boarders' rattles or gongs for calling away pikemen to repel boarders, or sail trimmers as needed; and it was stirring to hear Dana Green's strong magnetic voice as he called "Board the enemy, Hurrah!" It was a happy ship, as well-disciplined ships are apt to be. The Pacific Station was said to be the Paradise of First Lieutenants, the climate putting little difficulty in the way of keeping a ship both clean and smart. Hard, smokeless coal was used exclusively, and not much of that; and although the Navy's sails of hempen canvas were not so snowy white as the cotton canvas used by the merchant marine, they

and the rigging were spotless, as were also the decks and paint work.

On September 4 we arrived at San Francisco and soon went up to the Mare Island Navy Yard, and commenced to wholly dismantle the ship preparatory to putting her out of commission for extensive overhauling. The guns were hoisted out and landed, sails unbent, and all yards and masts sent ashore, even the lower masts being hoisted out.

Thus ended our Midshipman days, all of my class being then ordered to Washington for examination for promotion to commissioned rank. By that time the railroad across the continent had been completed and we made the eight-day journey in a way that was thought to be very comfortable then, though it would probably put present-day travelers in very bad humor.

## CHAPTER II

ASIATIC STATION—KOREAN EXPEDITION

U.S.S. *Benicia*—Reception to H.M.S. *Monarch*—Rio de Janeiro—Simon's Bay—Hurricane—Capture of forts—Cruise up the Yangtze Kiang—Cruise among the Philippines—Audience with the Emperor of Japan—Homeward bound—Voyage to San Francisco.

Having passed the examinations and received my first commission, as Ensign, I was delighted beyond measure to receive orders to the U. S. S. *Benicia,* third rate, as watch and division officer. That ship was fitting out at the Navy Yard, Portsmouth, New Hampshire, where she had just been built, and the officers joined her some weeks before commissioning, which ceremony was performed with due honors on December 1, 1869, with Commander Somerville Nicholson in command.

The *Benicia* was a sloop of war, of 2400 tons displacement, ship-rigged, with steam power which could drive her perhaps twelve knots, and as handsome a craft as ever floated. When, later, we entered Hong Kong harbor through the Lymoon Pass, the English Vice-Admiral Kellett on board his flagship, the *Ocean,* declared she was the most beautiful example of naval architecture he had ever seen. Like a beautiful woman, a handsome ship attracts all eyes and has the great initial advantage of eliciting pleased attention; and that simple pleased attention held us until displaced by pride in her great qualities of

seaworthiness, stiffness, handiness, and speed. The two smoke pipes could be lowered in sections, telescope fashion, or reefed as we called it, until entirely concealed within the hull, so that there was nothing to interfere with setting the mainsail. As a final concession to the waning importance of sail power, the propeller was two-bladed and, by a clever endless screw gear, could be hoisted into a well in the counter until the lower edge was four feet out of water. It was thus gotten out of the way immediately after leaving port on a passage of any material length. The battery was the standard battery of that time—a 60-pounder Parrott rifle on the forecastle, an XI-inch smoothbore on pivot carriage so as to fire on either side just abaft the forecastle, and ten IX-inch smoothbores in the waist. There were also two 20-pounder rifled howitzers on boat mounts on the poop.

It did not take us long to shake down in readiness for sea; but it was some little time before we made the final start for the China station. Several things delayed us. Among others was our being one of the reception fleet in Portland harbor when the British turret ship *Monarch* arrived bearing the body of George Peabody.

As that great philanthropist had passed many of his years in England and had endowed many charities there as well as at home, the government of that country, promptly, after his death, detailed that new ironclad to bring his body home; and Portland was selected as the place of reception on account of the depth of water in the harbor, the *Monarch* being of very deep draught. No less a person than Admiral Farragut was present as official representative of our country. There was much salut-

ing when he went afloat to return the visits of the captains. Upon occasion yards were manned also, which was bitter work for the men aloft as the thermometer was down to 19 degrees and peajackets could not be worn for the ceremony. On the day of the funeral we all had to go in special full dress, without overcoats; and we blessed our surgeon who was with us and who was well-enough posted as to the efficacy of Maine prohibition in force at that time, to take us into an apothecary's shop and order a dose of whisky for each. We were all very temperate in our drinking, but that prescription was greatly appreciated and we went through the whole ceremony without any ill effects. I felt some slight, additional interest in this episode because of learning from my family that, while Mr. Peabody had started in life as a merchant, he had had, in my grandfather's bank in Baltimore, the experience in banking that led to his establishing his banking house in London.

That big turret ship, the *Monarch,* considered the last word in sea fighting, was naturally an object of greatest interest. The revolving turret of our *Monitor* was the protoplasmic cell of the modern battleship of to-day throughout the world; the armored casemate, introduced at about the same time, was quickly abandoned and the struggle began in the development of turret ships. The steps made were often faulty, and the *Monarch* furnished an instance of that. She did seem most formidable, but it was related that when her captain and Admiral Farragut were discussing her, the Admiral pointed out that, while the guns were fully protected against any gunfire available at that time, the hull beneath the turrets was unprotected and if he had to encounter that

ship he would direct his fire under the turrets to smash their supports and bring them down, guns and all. It is said that the English captain finally nodded in acquiescence and exclaimed: "You're right, Admiral." Admiral Farragut, as is well known, had been opposed to ironclad construction, and during the Civil War maintained that he "would rather fight behind a wall of paper than a wall of iron." This opinion was based, I believe, partly upon a consideration of the moral effect of being cooped up in an iron box as contrasted with fighting in the open, and partly upon consideration of the effect of the bolt-ends, nuts and fragments projected inward from the armor when struck by a heavy shot in the early period of armored construction. The advances in metallurgy and methods of construction and the use of high explosives would undoubtedly have reversed his view in time, had he lived; it seems not improbable that it had been modified at the time of which I am speaking. In the same way the recent and continuing advances in chemistry, electricity, aircraft, and submarines have begun to modify our views concerning battleships as we now know them.

On March 2, 1870, we made sail from Portsmouth and stood away out to the eastward to avoid being "backstrapped on San Roque." Cape San Roque is the easternmost land of the South American continent, and the easterly trade winds, coupled with the strong equatorial current that runs westward off the north shore of Brazil, made beating around it impracticable. So a large offing had to be made before approaching that latitude to avoid the catastrophe of being "backstrapped;" we got as far east

as longitude 24 degrees and 50 minutes West at about the equator.

In that month of March we did not have to wait long for an opportunity to test the ship's seaworthiness, as we promptly encountered storm winds and rough seas, sometimes lying-to under storm mizzen and double reefed main trysail. Although occasionally made to roll deeply, her motion was always easy; yet she was "stiff" under canvas, that is to say, she stood up well under it, and stiffness and ease of motion being antagonistic are not easily combined. Altogether we grew more and more enthusiastic. On the first passage, forty-five days, to Rio de Janeiro, there were not many occasions for tacking ship and we were a little dubious at first as to her handiness. With the screw aperture in the deadwood, which, of course, diminishes the effect of the passing water on the rudder, she would have to be nursed a little, but with care she could be put about in stays.

Among the little incidents that served to punctuate a long sea voyage under the conditions of that time may be mentioned that, when nearly becalmed while about on the equator, we spoke an English barque, the *Ethel,* bound to London, and she acceded to our request that she take a mail bag from us. So we lowered a boat and sent it on board and the letters reached home before those that we afterwards sent from Rio. Those were very calm days, but rainy; in six hours, by spreading out awnings, we caught and put in the tanks three thousands gallons of rain water. We could condense water, of course, but that would involve starting fires in one of the main boilers with a great consumption of coal, and commensurate labor; so the practice was always, when possible, to catch water at sea; in port it was gen-

erally bought. The consumption of water in those days was far less than is usual now; with a complement of about two hundred and seventy officers and men the average daily expenditure was about three hundred gallons; on board the *Massachusetts,* during the Spanish War, in 1898, the allowance was *reduced* to one thousand six hundred gallons for a complement of some four hundred and fifty officers and men, while, in one other ship there, it was four thousand gallons. The difference is the natural result of the great change in the nature of the work and the conditions of life afloat.

On March 29, in latitude 1 degree 20 minutes North, longitude 25 degrees West, we felt two distinct earthquake shocks, although we were in not less than two thousands fathoms of water, and also heard a peculiar sound. It was rather sharp and rattling, and the ship trembled from the shocks as when the bottom-blow of a boiler was opened. The officer of the deck took in the light sails instantly in case anything should happen, but nothing did happen. We learned afterwards that that earthquake had been sensibly felt on the Spanish Main, as the northern shore of South America was called in those days.

Our arrival at Rio de Janeiro, on April 15, was marred by an unfortunate mishap. With a light, fair wind and flood tide we stood in under sail; but the wind suddenly failed, and the ship, taking a rank sheer to port in an eddy, was thrown under the bows of an American ship, the *Uncle Toby* of Freeport, Maine, lying at anchor, which stove in our starboard hammock netting, crushed the third cutter and gig, and carried away the main topgallant mast and topmast crosstrees. It was a bad mess. In time, with

the help of carpenters and calkers from shore, repairs were completed; but we never got a boat that we liked to replace that third cutter.

Brazil was an empire at that time. The war with Paraguay had just ended in victory and in the death of the Dictator Lopez, and there were occasional movements and reviews of returning troops. A Brazilian squadron arrived escorting Count d'Eu, son-in-law of the Emperor. Upon various occasions we joined the ships of other nationalities in dressing ship, manning yards, firing salutes, etc. We had the opportunity to see the Emperor, Dom Pedro, who was quite active in visits afloat as well as at reviews on shore. I was quite impressed by his fine presence and could well credit the reports of his good qualities and popularity.

The city of Rio, as it was usually called, had not begun to think of the drastic methods by which it was so vastly improved in appearance and sanitary conditions thirty years later. It was not attractive except for the costumes and appearance of the Indians that formed so large a part of the population and the gay old Rua do Oubidor with its shops and cafés. There was good opera, mostly *opera bouffe,* and we heard Offenbach's compositions to our hearts' content, "La Grande Duchesse," "Barbe Bleue," "La Belle Hélène," "La Périchole," and others being very much the rage.

Making sail from Brazilian waters on May 6, we reached Simon's Bay, in Cape Colony, on June 6. St. Simon's Town was a quiet little place, and owed its prosperity largely to the shelter afforded in the bay which had caused the diversion to it of commerce that would naturally seek Cape Town were there any shelter there. The construction of wet docks in

Table Bay has in turn operated largely to the detriment of St. Simon's Town. During the two weeks passed there we had some pleasant diversions in the way of rides about the vicinity on their clean-limbed horses.

During the 32-day passage from the Cape of Good Hope eastward we had very rough weather, as was to be expected. The sailing routes take down to latitude 40 degrees South in the Indian Ocean, where the westerly winds are more fierce than in the corresponding Roaring Forties of the North Atlantic. As we approached that parallel, gale succeeded gale, culminating in the night of June 29 and 30 when the wind attained hurricane force. I have never known it to blow so hard elsewhere except perhaps during a typhoon in Guam some thirty years later. The direction was almost exactly on our course, from which, however, we tried to diverge a couple of points so as to keep the ship exactly before the sea rather than before the wind. Under close-reefed fore and main topsails we tore along, making fifty-eight nautical miles in a watch of four hours; once or twice, during exceptionally furious puffs, we undoubtedly were making eighteen knots (twenty-one land miles) an hour. It was our speed that pulled us through; had we been under steam, with the stern at times high out of water, the racing of the propeller and engines would have made it impossible to do more than turn the engines over. The plan of trying to bring by the wind and lie-to was considered for a moment; but Captain Nicholson promptly forbade it. Had we tried it, there would have been no handling the sails in that wind and upon coming-to they would have sent the masts over the side which would quickly have pounded the hull open, even if it were

not rolled over by the mountainous waves while coming round. Double preventer braces had been put on both topsail and lower yards, and jumpers on the lower yards, and the clews of the topsails were lashed with six parts of three-inch Manila, and everything held. The hatches were, of course, all battened down, as heavy water was constantly coming on board; those of the officers who were on deck were either on the poop lashed to the rail or under the break of the poop near the quartermaster at the wheel. The Captain made some inquiry about the running lights forward, though seeing them would not have been of much help to any vessel that we would overtake, and, of course, no vessel was going any other way; but I said I would make my way along the waist and have a look. I got abreast of the starboard sidelight, and noted that it was burning all right, when the ship seemed to sink into the crest of a wave and be engulfed; tons of water crushed me to the deck and swept me aft. I first struck against the engine-room hatch with the shot rack around it, and from it was washed toward the ship's side. There I caught hold of something that proved to be the Jacob's ladder leading to the main lower rigging; I coiled my arms and legs around it and got my breath for a moment until, the ship rolling to starboard, the water on deck rushed to that side and poured over the rail which was over six feet high, completely submerging me. A roll to port brought my head above water again. In those short moments, looking aft dazed and gasping, in a flash of the frequent lightning I saw two officers lashed to the poop rail shaking hands, and had a dull sense of wonder at it. I learned afterwards that they were instinctively bidding each other good-by. Another roll to

starboard brought me under water again; in the little time required to think in such times I recognized that I was close to a gun and that if the upper half-port could be beaten out, it would soon relieve the deck of heavy water which I knew must be threatening to wash the men away from the wheel, and if that happened that would be the end. Watching my chance, I got to the gun and lashed myself to it, and found the battle-ax in its brass becket; it also seemed to me that the lanyards of the half-port had rendered somewhat and that it was no longer important in helping to keep the gun immovable. So I hacked away with the ax and soon cut the lanyards, and at the next roll the sea poured out and things became easier. In the inky blackness I next saw what seemed to be a light-colored ball of some kind being drawn toward the open port. Dropping the battle-ax I seized it instinctively, and was seized by it; it proved to be the head of a poor youngster who was so unfortunate as not to have a hair on his head! He was allowed to wear a wig. I managed to lash him to something until the decks were sufficiently clear for us to scramble aft. No more such heavy seas came aboard.

It remained very rough for some days after that, but things are comparative, and the weather seemed to improve quite rapidly. At last we arrived at the Dutch port of Anjer Point, and forgot all about the storm during the two days we were there. But a sequence of watch duty prevented my seeing anything on shore.

Sailing from Anjer Point on July 20, we had a week of delightful weather during which, with a little imagination, the officer of the watch could feel like the owner and skipper of a yacht. There was some

beating to windward and some "good full and by;" and there were strangers in sight bound, with us, through the Straits of Sunda and Bangka for Singapore. It was a matter of pride to hold our own with them. This was difficult, as some of them were clipper ships and were not bothered by the screw aperture in the deadwood which was a handicap, especially in tacking. One afternoon watch I had an interesting little episode. We were under all plain sail to royals, full and by to a moderate breeze, and there were some five or six ships not far away, and all to windward of us. I had every sheet flat, and yards carefully trimmed, and the spanker and head sheets so tended as to keep the helm about amidships. But these strangers did seem to be drawing away from us. I, therefore, hailed with increasing interest what looked like possibly a squall far away, a little off the weather bow, and speculated in my mind as to whether it could do anything for us. The darkish cloud grew larger as it approached, and it became evident that it was of such extent that practically every sail in sight would catch it. Those merchant ships, of course, were not manned by such heavy crews as men of war who have guns to man, and they soon began taking in their sails one at a time. When the squall had enveloped them, blotting us out, we were still under full sail. I had the watch at the topgallant and royal clew lines and other light gear and held on to the last moment; then when the first puff of wind came with drops of rain, with the help of the handy speaking trumpet, the precursor of the megaphone, I gave the order: "In to'gallant sails and royals; down flying jib; in spanker!" That done: "Jib downhaul! Round in the weather topsail braces! Settle away the topsail halyards.

clew down! Keep your luff, quartermaster!" And so we luffed her through it; and at the first inkling of a diminution in the wind we mastheaded the topsails, set the light sails, and went off on our course. By the time the ship emerged from the squall we were nearly under all sail again, and it must have seemed to the strangers that we had carried on through it all; and we had forged ahead a couple of miles perhaps. The men were keen on that sort of thing, as they also were in competitive drills with our own and foreign ships; stimulating their interest was an important element in preventing discontent with the conditions that made life dreary for the sailor of fifty years ago.

At Singapore, where we arrived on July 28, we found several of our men of war, including the *Delaware,* flying the flag of Rear Admiral Rowan, waiting there to be relieved by Rear Admiral John Rodgers who was on the way out in the *Colorado.* It was a very unique place in some ways; with a harbor of great capacity and a geographical position of great strategic importance from the commercial standpoint. It was the *entrepot* of the commerce of Southern Asia and the Indian archipelago. Great numbers of vessels of all descriptions were constantly arriving and departing; fine ship-rigged clippers, large steamers, and coasting vessels. The activity seemed remarkable for the size of the town. We had scant opportunity for observing things on shore because there were reasons for hurrying us away, and three days after our arrival we made sail for Hong Kong. Of these three days I happened to have but one "off."

In port, generally, the watch officers would "stand port watches;" that is to say, we would stand watch

and watch for two days, and then have days "off," depending upon the number of watch officers. On the days "off" we would usually have the time to ourselves after the regular forenoon and occasional afternoon drills.

We were now on the station and were generally quite active in our movements between ports in the various duties that come to ships on a station. Personal activities were confined to the seaports, the time not yet having come when foreigners were welcome far within either China or Japan, and we had, therefore, little use for leaves of absence and little opportunity to observe those interesting peoples away from contact with occidentals. The only divergences from the immediate seaboard were the "Expedition to Korea" and a cruise some six hundred miles up the Yangtze Kiang to Hankow.

In October, Commander Nicholson attained the rank of Captain and was detached, being relieved in the command by Commander Lewis A. Kimberley, well known as the former Executive Officer of Farragut's flagship, the *Hartford,* at New Orleans, and in whom we quickly recognized qualities that go to make a fine executive and a fine captain. There were not many other changes for some time, which is always a good thing for a ship; but in December of the same year we Ensigns received commissions as Masters, corresponding to the present grade of Lieutenant (Junior grade).

With the exception of one outbreak of smallpox, the health of the ship remained generally pretty good, but for a while the watch officers, other than myself, seemed to alternate on the sick list. I was particularly fortunate in not losing an hour of duty from sickness, or any other cause, during the entire

thirty-four months' cruise; but during more than one year, due to that alternation of the others, I never had an "all night in," the watches being reduced to three during that time. The epidemic of smallpox occurred while at anchor at Yokohama, in December, 1870. Immediately upon its appearance on board the captain quarantined the ship against visitors, and shortly afterwards rented a house on shore which was transformed into a temporary hospital with the senior surgeon, H. C. Nelson, in charge; to this hospital all cases were promptly transferred. The ship was also taken farther out and anchored near the lightship. By these means, and vaccination and proper hygienic measures, the disease was eradicated in a couple of months. Two were taken down in the wardroom, both of whom recovered. Among the crew there were several deaths. Renting that house for that purpose was the origin of the present Naval Hospital at Yokohama.

The other ships on the station were the flagship *Colorado,* the *Alaska,* the *Monocacy,* the *Ashuelot,* and the *Palos.* The *Colorado* was a superb-looking ship, full-rigged, of 4,700 tons displacement, one of a group that comprised the *Wabash,* the *Franklin* and the *Minnesota.* They were gun-deck ships, with batteries of forty IX-inch and one XI-inch, smoothbores, and a 60-pounder rifle. Some of them wore a broad, white stripe along the gun-deck ports; but the *Colorado's* side was an unbroken black, and especially under sail, was strikingly handsome with so vast an expanse of canvas, the main truck being two hundred feet above the water line. The ships were not often cruising in company, but upon these rare occasions she had to take minute care in trimming sails to avoid any other ship "sparing" her a

topgallant sail or clew of mainsail. In spar drill, in port, we had an advantage in that our main truck was only one hundred and fifty feet from the waterline.

The *Alaska* was a sister ship of the *Benicia.* To say more would be to paint the lily. The two were so alike in appearance that the officers of the British flagship *Ocean* declared that, when one or the other of us was seen entering port, the only way they could tell which it was was that the *Alaska* always had a monkey halfway out on the port fore yardarm as if conning the ship.

The *Monocacy* and the *Ashuelot* were paddle-wheel double-enders left over from the Civil War; they were useful in calm, shallow waters, and were sent out for service in the rivers. The *Palos* was a large tug, fitted with a house fore and aft, and carrying a few howitzers.

The *Benicia* had as smart a ship's company as I have ever seen. There was not much scope in those days for rivalry between ships in the matter of gunnery, but there was rivalry between divisions in each ship in "cast loose and provide," and between masts in spar and sail drills. When alongside another ship, however, the fore and main and mizzen tops would work furiously together for the common weal. I remember well once, when all the ships were exercising in unbending and bending sail, something seemed to be delaying our foretopmen, and, all sails being bent and set on the main, the captain of the maintop slid down the main topmast stay into the foretop to lend a hand. He was not in any boatswain's chair or bowline, but slid down by his hands and feet. The first trial we ever had with a foreigner was not long after our first arrival at Shanghai,

where we moored just below the chow-chow water. There was an English ship farther up, and at sundown she sent down topgallant masts and topgallant and royal yards in company with us, evidently as a challenge; whereupon at evening quarters word was passed around among the divisions: "There's a Britisher up beyond the bend who thinks he can fid topgallant masts, cross topgallant and royal yards and loose sail to a bowline." The next morning at colors we evidently took that ship by surprise, and beat them badly. But they rallied, and after a few mornings we ran neck and neck to the benefit of both.

It was only in boat racing that the *Benicia* was not preëminent. We did not do so very badly but made only a fair average. It was partly because we never got a satisfactory boat in place of the one crushed at Rio. But everything in the way of boats paled before the *Colorado's* barge, the *Daring*. That remarkable boat was known on every station. Pulling twelve oars like the ordinary cutter, its lines were so perfect that, going at top speed, it would make no disturbance in the water. Upon one occasion, toward the end of the cruise, that boat was beaten in a race by the *Alaska's* cutter; but many shrewdly suspected that the race was given away with an object, for there had to be another race before separating and the crew of the Alaska were so confident that they bet everything they could lay their hands on, with the result that the *Daring* won and, as the fleet expressed it, "The *Alaska* went to sea without a potato." (In those days the men had to "chip in" to buy potatoes for a sea passage.)

The most important racing event took place in Hong Kong harbor where there were a lot of ships of

different nations. The French flagship made two remarkable entries, with two immense 20-oared launches, and two men at each oar; the launches were painted black, and loomed up so that they were dubbed "schooners." There was much laughter at them; but they were not to be laughed at. The *Colorado's Daring* came in first; then came one of those "schooners," then an Englishman, and the other "schooner," after which the rest of us trailed along in a rather compact procession.

The Franco-Prussian war broke out while we were making the passage across the Indian Ocean; we were very much astonished when we learned of it at Anjer Point. Although it was a short war we had the opportunity, especially at Yokohama, to observe Prussian and French men of war lying near each other in the roadstead, and stories were rife as to how a French ship tried to goad a Prussian into going outside. The methods employed were told in considerable detail, but it cannot be positively stated that the tales were true.

We were rather more chummy with English ships than with any other, although, only five or six years having elapsed since our Civil War, there still remained some soreness of feeling toward that country for its sympathetic attitude toward the seceding States. But somehow the soreness did not seem to be felt toward Englishmen personally, as cordiality toward them was rather spontaneous. For instance, once, away up the Yangtze River, off Kiu Kiang where we anchored for a day, there was a little British gunboat that had not seen blue water for months. Their officers insisted that as many of us as could crowd into their little wardroom should go there and pass the evening; this we did, singing

and spinning yarns in greatest sympathy. There was one Lieutenant in particular who had a fine voice and sang Scotch songs delightfully.

We also got to be on specially good terms with the Russian ships *Vsadnick* and *Almaz.* Personally I saw a good deal of Lieutenant Rimski Korsakoff, and took many horseback rides with him at Yokohama. He gave me his photograph with his signature on the back. This led to an interesting little incident. Some forty years later, at a dinner in Washington, I chanced to be seated next to Mme. Vassilieff, wife of the Russian naval attaché. In the course of conversation I mentioned having known many Russian officers, and especially one with whom I used to ride in Yokohama. The lady asked who it was, and when I replied "Rimski Korsakoff," she exclaimed, "Why, that was my father!" I had the pleasure of giving her that photograph.

I also had occasion to remember an English merchant captain most pleasantly. Upon our first arrival at Nagasaki, I bought a tea set that caught my fancy and had it packed for shipment. Then I went on board an English bark, the *Oberon,* Captain Williams, which was about to sail for New York, and asked the Captain if he would take the box home for me, which he promptly agreed to do. When it was brought on board I said that I was afraid it was too late to get it on the *Manifest,* but that, if he would permit, I would like to prepay the freight as it was intended as a present to a member of my family. But he would not hear of it and said, "No, no; I am an old sailor, and you are a young one and I'll take it home for you." I spoke of the anniversary that its receipt was to celebrate at home, and he said that he ought to arrive at New York just

about that time. That is just what happened; and one of the first things that kind-hearted man did upon arrival was to send that box ashore to an express office. It reached home exactly on time. The Fraternity of the Sea!

The most notable episode of the cruise was the expedition to Korea. Mariners from American and other ships, wrecked or otherwise distressed in Korean waters, had been subjected to maltreatment in the Hermit Kingdom; and it was at last decided in Washington to endeavor to make a treaty which should protect Americans. The Mission was entrusted to Mr. Low, our minister to China, and Admiral Rodgers was directed to use his fleet to give dignity and, if necessary, protection, to the Mission. Accordingly the fleet assembled at Nagasaki, all present except the *Ashuelot*.

On May 16, 1871, the little fleet put to sea and stood westward taking up the Third order of Sailing. In that formation the flagship led, with the *Alaska* on her starboard quarter, the *Benicia* on the port quarter, and the *Monocacy* and the *Palos* astern of them, respectively. Partial examination of the western shores of Korea, where the harbors are, had been made by the French, but not much had been published in detail, and the soundings were erratic, the currents strong, and fogs frequent and dense. Care had to be taken, therefore, in navigating off the Salée River which was our destination. On May 19, we anchored off the Ferrières Islands and by May 23 had worked up to Eugénie Island. Before venturing any farther the channels and anchorage had to be examined, and a reconnaissance was made by four steam launches with the *Palos* as mother ship.

With the channel sounded out, the fleet got underway on May 30, and anchored above Ile Boisée.

Here communication was had with some Koreans who appeared to be friendly and went on board the flagship without hesitation. They were informed that the ships were American, that the purpose of the visit was friendly, and that an interview was desired with the governing authorities. This was promised, and some officials came on board to confer, but they proved to be of the third and fifth ranks and had no credential letters and no authority to initiate negotiations. So they were informed that only officials of the first rank, empowered to conduct negotiations, could be received by Mr. Low. They were also informed that, pending the progress of negotiations, we wished to make soundings of their waters and surveys of their shores. To this they made no objection, nor any reply which would indicate dissent, twenty-four hours being given to make the announcement to people along the river.

With the understanding that we might continue our surveys, an expedition was organized to examine the Salée River which leads to the Séoul River which passes near the city of Séoul, the capital and residence of the Sovereign. The expedition consisted of the *Monocacy* and the *Palos,* preceded by four steam launches. I was in charge of the *Benicia's* launch, which carried a 12-pounder rifled howitzer in the bow and Remington rifles for the crew of twelve. We started up the river at noon of June 1, with the launches sounding out the channel; but it was soon discovered that the tide, which was running flood, was so strong that the two ships could not go slow enough to allow the launches time for accurate soundings or angles. It was a period of

spring tides, and the rise was thirty to thirty-five feet with correspondingly great velocity of current. There was a sharp, double bend in the river which added greatly to the difficulties of navigation, the two ships being nearly unmanageable in the current. Under these conditions, as the point of the bend was approached, some forts and masked batteries, well placed tactically, suddenly opened fire with a number of guns which were afterwards found to be 32- and 24-pounders with a number of smaller pieces. It was an entire surprise, but the *Monocacy* and the *Palos* opened fire quickly and drove the Koreans from their guns. They could not stop, however, nor turn, until the tide had swept them beyond the projecting point. There they anchored, but not before the *Monocacy* had been carried by the current on a rock and had a hole broken through her bottom, which caused her to leak badly.

Not long after leaving the fleet my launch became disabled by the leadline fouling the propeller, and it took us some time to clear it, during which the expedition swept on far ahead. Shortly after clearing the line and starting ahead one of the crew remarked that the batteries on shore seemed to be saluting; but very quickly the heavy, irregular fire of the two ships showed that it was no peaceful salute. Under such circumstances there was nothing to do but join company as quickly as possible, and we went ahead at full speed. As there was not a hammock or anything that could be used to protect the engine and boiler, we were quite defenseless. I pointed out to the crew that the shore on the starboard hand seemed the more accessible, and if the enemy opened fire and sank the boat the best chance would be to swim to that side. They did open fire,

and how they happened not to destroy us was a marvel; the water all around was in a splash, but we were hit only three times, and none of these hits were serious. There was one Korean who seemed to be actively in command, and I involuntarily picked up my carbine and with one shot brought him down. Poor fellow! We got beyond all right; and when the fire ceased and I gathered that their guns had little or no lateral train, I could not resist the temptation of swinging the launch round and firing one 12-pounder Schenkl shell into the main fort. Then we rejoined the expedition where we were warmly received; shortly afterwards, having swung to the flood, the expedition returned to the fleet without further molestation.

It was at once determined to equip the available landing force and return the next morning to attack and destroy the forts that had fired upon our ships and boats. It was with some pleasure that, when called on board the flagship, I indicated on the chart two forts that had fired at our boat, though not at the major part of the expedition; and Admiral Rodgers drew around them the same red circle by which he had indicated the other forts to be destroyed.

Preparations were begun; but upon consideration it was concluded to wait ten days on account of the neap tides which would then prevail and render navigation of the little known river less perilous than during spring tides. Also, it would give proper opportunity to the Korean government to make suitable responses to Minister Low's demand for amends. No apology was offered, however; indeed the prefect of the district assumed that the ambushed attempt to cut off our surveying expedition was entirely in accordance with the proprieties of inter-

course between civilized peoples, their own civilization being proudly stated to be four thousand years old. So nothing remained but to make good the warning that had been given to the effect that, failing due amends, the Minister and Admiral would know how to obtain satisfaction for the wanton assault. It was decided at the same time that the punishment to be inflicted upon the Koreans should be confined to the destruction of the forts from which the offense had been given—a humane policy and one calculated to give point to the reprisal.

On June 10 the landing force embarked in twenty-two boats of the fleet which were taken in tow by the *Palos.* The *Monocacy,* with two steam launches, was to go in advance to sound out the channel and shell the first fort to clear away opposition to the landing and afterwards to clear the way for assault where it was practicable. The force landed was six hundred fifty strong, including one hundred marines and seven howitzers. At ten o'clock in the morning the expedition started amid the cheers of the fleet, with Commander H. C. Blake, of the *Alaska,* in chief command. He was to remain afloat, the landing force being directly commanded by Commander Kimberley, of the *Benicia.* This was at Commander Kimberley's urgent request, and his handling of that small force in the face of possibly heavy odds was admirable. I was in charge of two cutters, each carrying a 12-pounder howitzer and crew and skids for landing, Lieutenant Commander Douglas Cassel being in command of all the artillery.

The first fort was shelled by the *Monocacy;* the *Palos* then coming up, we cast off from her and pulled for the shore and effected a landing just below the fort, whereupon the Koreans fled. The point

of debarkation was chosen because it flanked the enemy's works leaving nothing to be feared in our rear, and it was seemingly as good as any in other respects. But the character of the shore proved to be most unfavorable, there being a broad belt of soft mud, traversed by deep gullies between the water and firm land, which was a quarter of a mile or more distant. The gullies were not perceptible until one stood upon their brink, the flat appearing as a continuous level plain. This was particularly hard on the artillery, the guns sinking to their axle trees and the men sometimes sinking to their thighs. I quickly saw that the landing skids provided in the landing outfit would be of little avail alone; so I commandeered all boat oars and boat hooks that I could get hold of besides my own, and laid them to form a sort of corduroy road with the skids on top of them, and, by fleeting them forward as we got the guns ahead, we finally got ashore and formed. The first fort was quickly occupied, and was designated as Marine Redoubt, because the marines were the first to enter. Its destruction was begun at once; the walls were leveled, the heavier guns, 32-pounders, were broken or spiked, and the smaller ones were thrown into the river. Then we bivouacked for the night on a plateau well protected by paddy fields and mud flats.

Early the next morning the advance was begun, and the march was most difficult. The country, a succession of steep hills, with deep, irregular ravines making it look like a heavy, chop sea, was difficult even for infantry, while the guns were gotten on only by widening the paths, where there were paths, and by cutting out bushes and filling up gullies in other places. They were dragged up steep acclivi-

ties by whole companies being detailed to help the artillerists or lowered from heights with ropes. Concerning this and the work of the guns, Commander Kimberley stated in his official report: "The handling of the artillery was a labor almost inconceivable, and it is a wonder that we got the pieces along at all. . . . . It is to the artillery, with their precise and rapid firing, that we owe our immunity from attack by the large body of Koreans on our left flank; having said this, what more can be said?" It was gathered that the force threatening our flank was some four to five thousand strong. They probably did not anticipate that the forts would be so speedily taken; with those defenses in our hands it was futile for them to attack.

By eleven o'clock the infantry companies had gained the crest nearest to the enemy's citadel which was built on the apex of a conical hill about one hundred fifty feet high from the bottom of the ravine through which they would have to pass to reach it. The hillside was steep and the walls of the fort joined the acclivity with scarcely a break in the line. Had not the face of the wall been somewhat shattered by the shells from the *Monocacy* and the howitzers on shore the escalade would have been most difficult. Behind the crest of the hill which they had occupied our people were formed for assault and rested for a while to recover from the fatigue of the hurried march under a hot sun; several had been prostrated by sunstroke, and several were wounded in the skirmishing. When Lieutenant Commander Casey, of the infantry, gave the order to charge they rushed forward down the slope and up the opposite hill with splendid dash and courage.

Lieutenant Hugh McKee was the first to mount the parapet and the first to leap into a hand-to-hand conflict, in which he fell at the head of his men. The fighting inside the fort was desperate. The Koreans' code did not conceive of any quarter being either given or taken, and they fought hopelessly to the last man. The reason for their desperation and refusal to surrender may be found in the conduct of the few prisoners taken at other points. When put in the boats to be taken ashore and released just before the fleet sailed, they found no joy in their freedom for they said they would be executed immediately for having allowed themselves to be taken alive.

The citadel thus captured was the key to the defenses on the point below, and in these there was no organized resistance. They were all torn down and the guns destroyed or thrown into the river. The smaller pieces were breechloaders of a unique pattern; the top of the breech was closed only by a hinged bronze flap for the length of the chamber, and a smaller gun, loaded by hand before insertion, was then put in and the flap closed. There were also a lot of jingals and matchlock muskets.

At slack, low water, about six o'clock, on June 12, the landing force embarked in their boats and were towed back to the fleet anchorage.

The *Monocacy* and *Palos* were saved from total loss in the strong currents by skill in handling, but the latter was badly injured. As soon as the boats had cast off and started for the shore, the *Palos* weighed and endeavored to pass through the narrows for the purpose of bringing her light guns into action on the forts; but she struck a rock in the middle of the channel which was not located on the chart,

and did not float until nine that evening, then leaking badly. Her injuries were temporarily patched up, as had been those of the *Monocacy* on June 1, and both vessels got to dock in Shanghai without mishap.

And so the Expedition to Korea ended without accomplishing its object, namely, securing a treaty of peace and understanding with the government. When one side acts treacherously and refuses all overtures, a mutual understanding is impossible. There is no doubt, however, that the Koreans acquired knowledge which saved them from further punishment, such as is bound to follow wanton attacks upon self-respecting people, and which paved the way for opening and completing negotiations a very few years afterward.

On July 3, the fleet stood out to sea and took up the convenient Third order of Sailing; but on the next morning, July 4, the *Monocacy* and *Palos* parted company and stood away to the southward for Shanghai to be docked. The rest shaped a course for Chefu and at noon presented a picture worthy of the pen of Fenimore Cooper. They were under all sail with a light breeze on the quarter, and in firing the national salute in celebration of the anniversary, full charges were used in the IX-inch guns, and the smoke formed by the black powder rolled along with the ships in clouds that enveloped everything. Between glimpses of the black hulls one could see from time to time a flying jib here, or a main royal there, or a spanker. As it was a following wind the dramatic picture lasted for some time after the salutes were concluded.

There was nothing much to hold ships at Chefu. Upon arrival at the station, the *Benicia* had gone to look out for some missionaries that had been

forced to flee from Tung Chow fu some time before; we had found the troubles ended and had taken them back to their post, some forty miles westward, and stayed with them long enough to be assured of their safety. Now, however, there was no concern regarding any one, and the ships dispersed in accordance with the policy of keeping all waters and coasts covered by a force so disposed as to cultivate friendly relations and to be able quickly to reach any threatened point. The very different policy followed to-day, of keeping the major units massed, is a necessary corollary of the existence of great fleets against which single ships are powerless, the only chance for victory being mass drill in preparation for conflict.

The *Benicia* proceeded to Shanghai, and, not long afterwards, had the diversion of a cruise up the Yangtze River as far as Hankow, some six hundred miles from the sea. This was in September, about the middle of the season of high water, which enabled us to go that far without difficulty, there being a variation of about fifty feet between high and low river. So far as the mere depth is concerned our draft would have allowed us to go much farther up, but the current, with eddies and swirls caused by the uneven bed, would have been dangerous to a vessel of the *Benicia's* size and build. Even off Hankow, where we moored in ten fathoms of water, not only was the current very strong, but the swirls were such that the ship rode very uneasily, sheering about most erratically. As a result of these conditions we performed, in anchoring, a feat not usually considered possible in well-bred professional circles. To say that we moored with an elbow in the hawse would generally arouse derisive comment; but such was

actually the case. Upon getting underway nine days later we found that in mooring, with the ship sheering wildly about, sometimes surging ahead and at others with a taut chain, and with the muddiness of the water concealing the trend of the chain below the surface, the downstream anchor had actually been dropped in the bight of the upstream chain. And a fine time we had clearing it!

The city had but recently been made a treaty port, and was the most remote of any; this feature indicated in a fair measure the scant freedom of movement away from its immediate vicinity. Excepting in the spring, in the tea season, the place seemed quite dead, the immense Chinese and minute European quarters being entirely distinct, and with little intercourse, as in all treaty ports. The few white people there, initiating a foreign commerce which since then has grown rapidly, were naturally glad to see us and most cordial in their welcome. The nine days of our stay passed pleasantly; but there was not much for us to carry away in the form of reminiscences.

On the passage down the river there were places of greater interest where we anchored and passed a few days. Prominent among these was Nanking, still answering to that popular name, though officially known as Kiang-Ning, since the accession to power of the present Manchu rulers. Approach to this celebrated city stimulated interest in ancient history, and we had learned of the various sights, including the tombs of the Ming (bright) dynasty established in 1368 by the priest Chu Yuen Chang, son of a Chinese laboring man, and overthrown in 1644 when Nanking was taken by the Manchu Tartars. On my one afternoon I joined a cavalcade and our wiry

Chinese ponies took us everywhere. Although forewarned, we experienced some disappointment at the desolation still reigning, eighteen years not having sufficed even to begin recovery from the destruction which followed the capture of the city by the T'aip'ing rebels in 1853. Besides tearing down all public buildings, they had destroyed national monuments which can never be replaced. Among these was the famous porcelain tower, begun by Yung Lo, the third sovereign of the Ming dynasty, in 1413, to commemorate the virtues of his mother; it was nineteen years in building, not being completed until after his death in 1425, before which date he had transferred his court to Peking. The bricks were of the finest white porcelain, with green tiles forming overhanging eaves at each of the nine stories; it was so completely destroyed that our guide would not say positively that some bits of white porcelain, glazed on one side, that I unearthed on the site had really been part of the structure. Such vandalism perpetrated so recently seemed like an anachronism.

The great wall about the city had naturally been razed in large part by the victorious rebels, though there were sections remaining that told of its immensity; in places where it traversed ravines it was fully seventy feet high, and thirty feet thick at the base. The Ming tombs, few in number, outside the wall, are those of the founder of the dynasty and his immediate successor, and we found them uncared for and going to decay. The great Ming tombs are in Peking, to which city the Ming ruler, Yung Lo, transferred the capital and in which the dynasty reigned until the Manchu subjugation in 1644, when China once more passed under the foreign yoke.

That foreign yoke, however, does not seem so very foreign to the casual observer.

Besides Nanking we visited Kiu Kiang and Chin Kiang. At each place the captain, accompanied by one or two officers, visited the Taotai, all of whom seemed to regard with extreme complacency the opening of the Yangtze Kiang to commerce. That is not to be wondered at in view of the tremendous increase of commercial activity and the affluence that it brought to them.

During the following seven months our ship was again quite active, going down the China coast and among the Philippine Islands and up again to Yokohama, during which time we visited (or revisited) twenty-one ports. The Philippines presented a new field of very different aspect, and the towns off which we anchored, Manila, Ilo Ilo, and Cebu, are now, no doubt, very different in material as well as in social features, from what we saw then. There was abundant cordiality, especially in the smaller places; and the very name of our ship, entirely Spanish in origin and pronounced with proper softness by the Filipinos, Bayneethia, tended to induce a friendly attitude.

At Cebu, on the island of the same name, the officers were entertained with great hospitality by the Governor, Don Francisco Alonso y Gomez, whose charming señora and two daughters were most untiring in devising ways and means to make our stay pleasant. Drives about the vicinity of the town in their well-appointed carriage were not only enjoyable but instructive and were always followed by a pleasant evening at the Palace where, generally, there was music. Before sailing we in turn gave an afternoon reception on board, at which we increased

our familiarity with the favorite dance, *la Danza,* which, a year later in Havana, I recognized as much the same as *la Habanera.*

It is just as well that we are denied the faculty of seeing ahead, however intently we may look. Some thirty years later, after the Spanish War, I was chatting one day in Washington with the Spanish Minister and chanced to allude to that attractive family and to speak of the younger of the two daughters having married a prominent officer of the Spanish army, whom I had met and whose name I mentioned. The Minister replied: "Yes, I know; he was killed during a bombardment of the Santiago forts by your ships." That was a shock indeed, and not diminished by the consciousness that my ship, the *Massachusetts,* had taken part in all those bombardments.

Not to be neglected in the pleasant retrospect of Cebu was the opportunity we had to revel in that most luscious of fruits, the mango, which, through culture and selection, had attained a delicacy superior to any that I have seen elsewhere. It is unapproachable as a *bonne bouche,* and we did not find that we had to acquire the taste; any one who has to acquire the taste has simply never eaten those of Cebu.

Working northward again, touching at various ports, including this time the Pagoda anchorage of Fuchow, the approach to which is so picturesque, and also going through the Inland Sea of Japan and having a last look at its attractive scenery, we finally anchored off Yokohama on May 15, in time to be present when Admiral Rodgers transferred the command of the fleet to Rear Admiral Thornton A. Jenkins. That also entailed our being in company with

the flagship there two weeks later when Admiral Jenkins was granted an audience with His Majesty the Emperor, for which function several of our officers accompanied the Admiral as members of his staff.

When the Mikado Mutsu Hito abolished the Shogunate, in 1868, and assumed full imperial power and responsibility, the center of authority and government was gradually transferred from Kioto, but the complete establishment of the imperial government in Yeddo was not consummated until 1871, the name of the new capital being changed to Tokyo, or Eastern Capital. By a curious, seeming inconsistency, recalling the inconsistencies that not infrequently mark the issues between our own political parties in America, the Mikado's decision to abolish the Shogunate, with the support, and perhaps on the initiative, of the conservative *daimios,* was arrived at as a result of the anger aroused by the action of the Shogun in concluding the treaty with Commodore Perry in 1854, by which certain ports were to be opened to foreign trade. Yet afterwards he was in cordial agreement with the declarations of the powerful *daimios* of Satsuma and Choshu who, while approving the suppression of the Shogun, favored opening the country to foreign intercourse and the adoption of many far-reaching reforms. Whether the policy of this wisely patriotic sovereign was inspired by the lofty principles of those powerful nobles, or merely coincident with them, there has been opportunity since then to note that in the span of one generation he has raised his country from a condition of benighted isolation to the first rank of nations.

All this could not be foreseen at the time of Ad-

miral Jenkins's audience; but there seemed to be a significant forecast in the outstanding feature of the ceremony, namely, that when we were ushered into the throne room amid an impressive hush and deference, the Emperor rose and acknowledged the Admiral's entrance and presence standing—an epoch-making departure from time-honored usage. This was among the first acts after the final establishment of the court and imperial authority in Tokyo, and it augured much for the future.

I had the good fortune to be a member of the Admiral's temporary staff upon this important occasion; and, pleasantly enough, I had the opportunity to refer to it thirty-six years later in an address at a function in that same city of Tokyo after being present again at an audience with the same enlightened ruler.

Various more or less formal events took place then between Tokyo and Yokohama; but the time came for the *Benicia* to return to America. At nine o'clock on July 4, when all ships present, of all nations, were dressed in rainbow, as it was then called, the call was made for all hands "Up Anchor for Home!" We got under way under steam with the long homeward-bound pennant at the masthead, cheered ship on passing the *Colorado* and *Idaho,* saluted Admiral Jenkins with thirteen guns, and stood out to sea. When out of sight we hauled down all bunting, made sail and hoisted the propeller.

My great friend, Lieutenant Pillsbury, who had been on board the flagship *Colorado* throughout the cruise, was detached for some reason and reported on board for duty on the homeward voyage. When we had piped down from "All hands," I saw him standing on the poop gazing at the ship he had just

left. Recognizing intuitively what was in his mind, I went up to him and said: "It's hard to leave the old ship and shipmates even when homeward bound, eh, Pills?" He nodded and took my arm, and we walked up and down a few times in silence.

Another officer transferred to the *Benicia* for temporary duty on the passage to San Francisco was Master C. W. Chipp, who had been my roommate in the second class year at the Academy, and who afterwards was a member of De Long's ill-fated polar expedition in the *Jeannette,* perishing up there with De Long and his party. He was a brave and capable officer.

We took the composite great circle route across the Pacific, not going above latitude 45° 30′, and had the usual varieties of weather—fair winds, foul winds, calms, fogs, etc. One morning when about half way over, daylight revealed a barque becalmed, as we were, about three miles distant, and we recognized a North German that had sailed from Yokohama three or four days before we did. Later, as we looked, we saw her heel slightly as her sails filled, and brace up the yards and stand away on her course; she was hull-down before that cat's paw reached us. But when we entered the Golden Gate she had not yet arrived.

August 5 saw us in San Francisco harbor, and the next day at the Mare Island Navy Yard, where preparations were begun for overhauling the ship. The people at that yard were delightfully jolly and hospitable, and the weeks passed most pleasantly to the end of the month, when we were all detached and ordered east to our homes after the ship had been through the usual inspection.

## CHAPTER III

### WEST INDIES—"VIRGINIUS" AFFAIR

Stagnation in the Navy—Chagres fever—Transferred to U.S.S. *Pinta*—Conclusion of *Virginius* Affair—Transferred to U.S.S. *Mayflower*—Threw guns overboard in a gale.

In the autumn of 1872, before going to sea again, I took the examinations for promotion and received my commission as Lieutenant. That rank and title remained mine for twenty-one years, lacking one month.

After the conclusion of the Civil War, there was a period of arrested naval development, and it was found necessary to reduce the officer personnel to a number commensurate with the size of the naval establishment. It is possible that those who were responsible for the condition to which that establishment sank were not wholly conscious of what they were bringing about; they may have been blinded by political necessities. There was certainly a vast difference in the appreciation of the situation by different Secretaries. Year after year one could read in the Annual Reports pleasant assurances that the Navy was "in excellent or highly satisfactory condition," or "in better condition than ever before," until light was thrown on the subject in the opening sentences of Secretary Hunt's Report, in 1881, which read: "The condition of the Navy imperatively demands the prompt and earnest atten-

tion of Congress. Unless some action be had in its behalf it must soon dwindle into insignificance."

To keep pace, downward, with the *matériel* of the Navy, the Act of July 15, 1870, reduced the number of Lieutenant Commanders by one hundred, and all promotion from the Lieutenant grade was wholly stopped until the reduction was effected. The head of the Lieutenants' list, therefore, remained stationary for over six years, and promotion was again retarded by the Act of August 5, 1889. Whether the blow could have been softened and the curtailment effected by some less drastic action is at least open to discussion; the one thing certain is that the curtailment *was* effected, and undoubtedly at the cost of efficiency.

There was no particularly loud lamenting in the service over the nonexistence of promotion; promotion simply did not enter into our scheme of life. During the twenty-one years that I was in the one grade I could have married, had a son, got him appointed to the Naval Academy, and have seen him graduate and come out into the service and relieve me on midwatch. From a material point of view it worked great hardship, the Navy pay being low. But as time passed the officers of that period could not fail to be conscious that a more insidious injury was being done us by our being kept in a young man's grade and duty when no longer young. At the age of forty-four—many others were older—I was officially still a young officer. Not only is it a human tendency to measure one's self by the scale imposed by circumstances, but one suffers by the lack of experience and of progressive responsibility that results from such stagnation. It is something of a wonder that the men of that period did as well as

they did upon induction into higher rank and promotion through the four higher grades in much less time than they had passed in the one low grade. It is also not a wonder, perhaps, but a pleasant recollection, that through it all no restlessness ever exhibited itself in the form of lessened respect and obedience while performing subordinate duties.

I was not philosophizing on this subject in the autumn of 1872, but joyously reported in my new rank on the North Atlantic Station, which might well have been called the West India Station. I first reported on board the flagship *Worcester,* at Key West, and was retained on board until we fell in with the *Canandaigua.* I joined the latter vessel in March, 1873.

The *Canandaigua* was a quite formidable ship for her size and type, being of about 200 tons less displacement than the *Benicia,* but having a somewhat heavier battery in that, while she had two less IX-inch guns, she carried one more XI-inch, which, being on a pivot carriage on the quarter-deck, could be fought on either side and was thus equivalent to two guns on broadside carriages.

The usual, desultory cruising kept us fairly active in various parts of the West Indies and the Mexican Coast until July 29, when we arrived at Aspinwall, now more properly known as Colon, on the Isthmus of Panama. Here we found the U.S.S. *Kansas,* a smaller ship than the *Canandaigua,* and a neat, little Spanish gunboat named *Bazan.* There was also in the harbor the American steamer *Virginius;* and right then and there occurred the inception of the celebrated "*Virginius* affair" which quickly imperiled the relations between our country and Spain and threatened to precipitate the war which finally

ended the tense situation twenty-five years later. The situation as it developed got to be known in the Navy as "The First Cubic War," some historian having apparently raked up the ancient Punic wars and parodied the term to fit the restless island that was a thorn in our side for so many years.

The *Virginius* was regarded with very reasonable suspicion by Spain, it being known that filibustering expeditions were being attempted by Cuban sympathizers. While at Aspinwall the suspicions became acute, and the *Bazan* was active in inquiries as to the genuineness of her papers; they seemed all right, and no definite charge was supportable as to possible perjury or other malfeasance. The Captain of the *Bazan* was a brave and courteous officer who did his duty in a straightforward manner. There were some conversations and some correspondence in which I had the interesting part of interpreter and translator; and I was impressed by that Spanish officer's unexcited exposition of his orders and duties in face of the obvious situation. But, however obvious the situation, the papers all seemed irreproachable, and there was nothing else for us to go by.

One afternoon at about half-past one our officer of the deck observed that the *Bazan* had trained one of her two small guns (possibly 30-pounder rifles) on the *Virginius.* We promptly got out a kedge from the port quarter and sprung the broadside to bear, trained the after XI-inch on the *Bazan,* raised the smokepipe, and made preparations for slipping the cable, the men being grouped near their guns. At half-past two the *Kansas* warped ahead to a position between the *Virginius* and the *Bazan.* At ten minutes after six the *Virginius,* having acquainted us with her intention, got under way and steamed out

of the harbor; but the *Kansas,* handsomely handled by Commander Allen V. Reed, got under way at the same time and maneuvered in such a way that she was always between her and the *Bazan* so that the latter could not carry out orders except by firing actually through an American vessel of war. The *Canandaigua's* battery was all ready, of course; and any one seeing, on the one hand, two little 30-pounders, and, on the other, the yawning muzzles of two XI-inch, four IX-inch, and two 4-inch rifles, at about three hundred yards' range, could not blame that gallant young officer for throwing up his hands and saying he had done all he could. After escorting the *Virginius* well off the coast, the *Kansas* returned to anchor.

The next we heard of the *Virginius* was that she had been captured in an overt act of filibustering, and taken to Santiago de Cuba, where her officers and crew were being tried and summarily executed. This, however, was checked by the prompt action of the *Wyoming* under the command of Commander William B. Cushing, the dare-devil who in the Civil War had traversed interior waters with a steam launch and torpedoed and sunk the Confederate ironclad *Albemarle.* While lying off Aspinwall he heard what had happened and, knowing there were many Americans in the crew, he rushed his ship with all speed to Santiago, arrived there on November 16, and instantly protested against any further executions. His protests were heeded. Not long afterwards the *Juniata* and *Kansas* arrived at that port, and, as other and more distant pressure was brought to bear on Spain, the survivors were rescued.

Before that culminated the *Canandaigua* had an experience far from pleasant. When the *Kansas*

sailed from Aspinwall we remained, and very shortly afterwards the Chagres fever broke out on board. While there were no deaths, the sick list got to be so large that the Captain finally took it upon himself to proceed with the ship to Kingston, Jamaica, and report conditions by telegraph from there. It was only by sending seamen and ordinary seamen down to shovel coal that we were able to make the passage. Of eleven officers in the wardroom all but two went down at different times. I was the last one, not succumbing until after we had anchored in Kingston harbor. Telegraphic orders reached us promptly to remain there until the health of the crew was sufficiently restored and then to return to Aspinwall. But upon receipt of the Captain's written report the Department changed the orders, and on September 11 we sailed for Key West and eventually for Philadelphia.

We found a very hospitable spirit in Kingston, made many pleasant acquaintances and spent several enjoyable weeks there while regaining our strength after the fever. When convalescent, I was advised by the medical officer to take a wineglass full of old Jamaica rum three times a day, and my shipmates obtained through friends on shore several bottles of the liquor thirty-three years old. There really seemed to be life in every drop of it, so that I recuperated very quickly and was soon able to resume duty and take rides and drives.

On October 12 the *Canandaigua* arrived at the Navy Yard in Philadelphia and was docked and otherwise put under repairs. But in the early part of November came the news of the *Virginius's* people being shot at Santiago, and, as a part of the feverish war preparations, orders came to fit the naval tug

*Pinta* with a spar-torpedo outfit besides her two 30-pounder Parrotts. Lieutenant Commander H. H. Gorringe was sent to command her. He had made hurried inquiries in Washington for a lieutenant to go as executive and navigator, and I had been suggested to him; but, with the sensitiveness that I afterwards found to be so strong a feature of his temperament, he would not ask me if I would like to go. Never having met him I had no occasion to hunt him up, and it was only a few days before the little craft was to go in commission that I happened to hear of his inquiries and the result. I immediately communicated with him, telling him that if he wanted an executive and navigator who was not afraid of work and had no one else in view, I should be glad to offer my services. And so it was arranged, by telegraph. I reported on board on November 23, and we left the yard on November 25, bound for Key West.

For that first passage at sea we had only one other line officer, a gunner, to stand watch and watch with me, my navigating duties being extra. But we reached Key West on December 4, and another officer, Master D. D. V. Stuart, reported on board.

By that time the whole available force of the Navy which could be put afloat on the Atlantic Ocean was under orders to reinforce the North Atlantic Station; every available wooden and ironclad ship "in ordinary" was despatched as rapidly as it could be put in order and properly manned and organized. The *Lancaster* and the *Ticonderoga* were recalled from the South Atlantic and the whole European fleet from the Mediterranean, and ordered to concentrate at Key West. It was an aggregation of handsome ships, and powerful for their type, beginning

with the four of the *Colorado* class with their batteries of forty-two IX-inch guns beside an XI-inch and a rifle. Possibly some comfort was derived from contemplation of the six monitors in case the fighting could be confined to smooth water and the immediate proximity of a base, a condition that could not be expected to continue long. For torpedo craft there were only the three tugs, the *Pinta,* the *Fortune* and the *Mayflower,* equipped with a spar-torpedo which would probably have done effective work if it ever came in contact with the hull of the enemy's ship.

A protocol was arranged between the United States and Spain and Lieutenant Aulick Palmer, of the Marine Corps, came on board on December 13 for transportation to Havana, *en route* to Santiago overland as a special messenger of the Navy Department. Landing him at Havana on December 14, we proceeded with all despatch to Santiago with a duplicate of the protocol for delivery to the senior naval officer there present. Arriving there on December 18, we found that the *Juniata* was receiving the survivors of the *Virginius,* with whom she immediately departed.

We also left Santiago on December 18 to return to Key West, but it was with the consciousness that our remaining coal supply was scant. Everything possible was done in the fireroom to make economical steaming and to utilize every scrap of coal dust and wood; and everything possible was done in the navigation to take advantage of favorable currents and cut off every unnecessary mile. It was a close shave. We got inside of Sand Key light on the evening of December 22, but while making up to the coal wharf the steam gave out while we were still several hun-

dred yards from it and we had to anchor. The next morning we sent a boat in and brought off coal enough to get up to the wharf.

On the evening of December 24, we were off again for Havana, where we arrived on Christmas morning and remained until December 27. The berth assigned to us was between two large Spanish frigates which seemed enormous by contrast. That evening our men took to singing stirring songs with choruses, and the crew of the British cruiser *Danæ* echoed and alternated with us in most friendly fashion. It really sounded very defiant. But Englishmen and Americans seem instinctively sympathetic when either one is threatened with difficulty.

By January the tension was over, Spain having acceded to our demands; but the forces continued to assemble. The *Wabash* arrived from the Mediterranean on January 3, 1874, with Rear Admiral A. L. Case to whom the chief command was turned over by Rear Admiral G. L. Scott who was in command of the North Atlantic Station.

The concentration of ships being much greater than had occurred at any time since the Civil War, after the disturbed relations were settled, the opportunity was seized to carry out some naval maneuvering which is so valuable as a preparation for war. The Bay of Florida, north of the Tortugas, was an ideal place with its sheltered waters, easy anchorage and mild winter climate. A new signal book had just been completed under the direction of the Bureau of Navigation, and the opportunity was thus offered to practice the tactical system under the eye of Commodore Foxhall A. Parker who had worked it out. The fleet left the vicinity of Key West on February 4, and, rounding the Tortugas, proceeded to

the drill ground. Shortly before that Admiral Scott was given leave to part company and go on an independent cruise. The regulations concerning what air ships' bands shall play upon passing another ship with colors flying were not precise in those days as they are now; and no doubt Admiral Case enjoyed the joke as much as any one when Admiral Scott's flagship, the *Worcester,* steamed by the *Wabash* and proceeded to sea with its band playing an air very much in vogue at that time:

Ain't I glad to get out o' the wilderness,
Get out o' the wilderness, get out o' the wilderness?
Ain't I glad to get out o' the wilderness?
Yes . . . I . . . am.

During the month devoted to tactical exercises the *Pinta* was employed actively as despatch boat and in towing coal schooners out from Key West and putting them alongside the ships. The former duty involved frequent trips to Cedar Keys and Tampa with mail and telegrams, the facilities of Key West being *nil* at that time. In going in and out from Key West it was imperative that the small Northwest channel should be used, if possible, to obviate the necessity of going away off to the westward around the Tortugas. The local pilot demurred at taking a vessel of that size out through that channel, but Captain Gorringe thought there could be no great difficulty about it, and we took her out one morning and returned that night after dark without a pilot. That made our attendance on the fleet practical. Towing the coal schooners about seemed a sad comedown from the stirring torpedo work that we were equipped for; but even that provided good experi-

ence. I quickly learned that there was a good deal more in tugboating than I had thought.

The exercises being concluded, Admiral Case went to Havana in his flagship, the *Wabash,* entering the harbor with the *Despatch* and the *Pinta* close on her port and starboard quarters. That flagship of ours looked very handsome; but, as she lay at anchor near the Spanish ironclad flagship *Arapiles,* one could but realize that none of her IX-inch smoothbores could send a shell through the armor plate of the Spaniard. The two admirals exchanged visits of courtesy, and we departed a couple of days later with the whole *Virginius* incident apparently forgotten. It was an exceptionally beautiful day, and, as we steamed out through the entrance, both shores were crowded with sightseers. The *Wabash's* band, a very spirited one, played with great effect a popular air of the day, "Listen to the Mocking Bird," with thrills and frills that reverberated fantastically from the rocky shores on either hand.

On April 10 the officers of the *Mayflower* and the *Pinta* were exchanged for some reason, and we brought the former north. When in the Gulf Stream, off Cape Florida, we encountered a moderate gale from the northeast and began shipping large quantities of water over the bow. The *Mayflower* had the same guns (4-inch rifles) as the *Pinta,* but not nearly so well disposed from any viewpoint. The *Pinta* had one forward and one aft, on pivot carriages so that both could be trained on either beam, while the *Mayflower's* were both forward, in broadside, and the weight there had to be counterbalanced by several tons of iron kentledge aft. It was due to this that she plunged so heavily and shipped so much water.

On the second day the sea became very high and short and the little ship labored heavily. Finally, in the afternoon, a heavy sea boarded her, and before she could recover herself another came aboard. The Captain held a hurried, informal consultation on top of the deck house, at which it was instantly and unanimously decided that the guns and ballast should be hove overboard as soon as possible and if possible. The very misplacement of the guns was our salvation. The two guns were nearly abreast of a short foremast, and I got a tackle down from the mast head and hooked it into the open jaws of the cascabel. Getting a strain on that, removing the capsquares, and with a number of men, well lashed against being washed overboard, manning the tackle, we took advantage of a heavy roll and the starboard gun was tipped over the side without injury to anything. Then the same was done with the port gun which, however, struck the guard, ripping off a piece but not weakening the structure. During this time about five tons of kentledge were passed up by hand aft, a bar at a time, and thrown over the side. The effect on the ship's behavior was marked, and comparatively little water came on board. In the *Pinta* the guns probably could not have been thrown overboard during the gale; but then, with them disposed as they were, the necessity probably would not have arisen.

On the day after that heavy blow we were able to head off and lay our course, which we shaped for Savannah. Then we thought we discovered why the *Mayflower* was sent north and the *Pinta* retained for further service in the Gulf; not only was the former's engine in such condition as to make it almost impossible to back it, but the boiler leaked so that proper

steam pressure could not be maintained, and consequently the speed was greatly reduced. As the weather favored us again, the wind having veered to the southward, we rigged a squaresail with the forecastle awning, which helped us along quite a little. We arrived off Savannah and came up to the city without mishap. In a few days we got the engine and boiler patched up, after which we proceeded to the Washington Navy Yard.

During the six months on board that little *Pinta,* Captain Gorringe and I had become great friends, and in later years we became very intimate; he had such sterling qualities as to endear him to any one who could pierce the crust of an unfortunate sensitiveness which seemed at times to indicate a nature very foreign to what his really was. Born in the Island of Tobago, he had enlisted as a seaman in the Navy at the beginning of the Civil War and before its end had worked his way to the command of several vessels by sheer bravery and capacity. In the examinations for admission to the regular service after the war, he passed very high, only three entering above him. A notable element in his character was the most absolute, unquestioning self-confidence; never was it "Can this be done?" but only "How shall this be done?" Such qualities radiate a stimulating atmosphere.

## CHAPTER IV

### TRANSIT OF VENUS CRUISE

U.S.S. *Swartara* with Transit of Venus parties—Bahia—Cape Town—Crozet Islands—Kerguelen Island—Hobart Town, Tasmania—Bluff Harbor, New Zealand—Chatham Islands—Dunedin and Port Chalmers—Hobart Town—Auckland Islands—Port Chalmers—Chatham Islands—Hobart Town—Homeward bound—Voyage around the Horn—A swim in mid-ocean.

Happening to visit the Navy Department one day, after the arrival of the *Mayflower* at Washington, I learned that a brand-new, full-rigged ship, the *Swatara,* was being hurriedly completed and outfitted at New York to carry five parties of astronomers and photographers to islands in the Indian and South Pacific Oceans to observe the transit of Venus, and that there was still a vacancy among the watch officers. My prompt suggestion that I might fill the vacancy was as promptly approved, and I was ordered without delay.

The completion of the ship was being rushed, as the transit was to occur on December 8, and there was no time to be lost in making a start in order to get the parties to their stations in time to set up their instruments and be ready for observations.

Under the guise of repairs, the *Swatara* had been entirely rebuilt, of larger size and of live oak in place of the white oak of the original vessel, and was expected to prove a staunch and able craft. This ex-

pectation was fulfilled, something that we had every reason to rejoice in, for more bad weather than we had is rarely experienced, in an equal space of time. She was very handy, not so fast as the *Benicia;* a little drier perhaps when lying-to in heavy weather. There was no battery on board except one 60-pounder rifle on the forecastle and a couple of howitzers. This was because of the special nature of her duty and the necessity of storing on the spar deck lumber and other material for the observation stations. The weight and position of this compensated, at least in part, for the absence of the guns until the parties were landed, after which she was a little more lively. The smoke pipe was telescopic as usual, and the three-bladed propeller was so fitted as to be uncoupled when desired and allowed to revolve freely, thus offering diminished resistance. The plan of a two-bladed screw, to be hoisted out of water, which had been so highly regarded in the *Benicia,* had apparently fallen into disfavor, possibly because of the time it took to hoist it, during which the ship had to be kept hove-to.

We were put in commission on May 11, 1874, with Commander Ralph Chandler in command. We had a pleasant mess in the wardroom, and the watch officers were all experienced seamen; as indicative of this it may be mentioned that I was the junior watch by several years, although four years earlier I had been senior watch of the *Benicia* which was about six hundred tons larger. Among them was Lieutenant Pillsbury, also Lieutenant Charles H. Stockton who, since his retirement as a rear admiral, has been rounding out his career as President of the George Washington University. He was also Delegate Plenipotentiary to the London Naval Conference.

On June 8 we put to sea, and from that time on we did everything possible to make time, standing well out to the eastward to avoid being back-strapped on San Roque, and raising steam and using the engine for crossing the doldrums. Just before reaching the region of calms a little incident gave to the captain an opportunity to exhibit his "spirit of repartee," as we called it. There was a light breeze, by which we were making some five knots an hour, and a barque bound somewhere northward was about to pass fairly close to us. We made signal by the new International Code: "Will you take our mail?" By agreement among all maritime nations the International Code had some time before been adopted in place of the old Commercial Code, both being legal until the end of that year, 1874, after which the former alone was allowable and obligatory. The barque answered by the Commercial Code: "I do not understand your signal." It was quite possible that, returning from the Far East probably, she had not provided herself with the International Code; but it did not seem likely. It was thought possible that the reply might have been dictated by a desire not to lose an hour of that five-knot breeze. Captain Chandler solved it to his own satisfaction, signaling back by the International Code, "Hog," while making the comment, "If he hasn't got the code he won't understand; if he has got it, it will apply."

A couple of days later we met the French barque *Molière,* fifty-eight days out from the Bourbon Islands, bound for Cadiz with a cargo of sugar. She understood our signal, hove-to, and took our mail bag, and on parting company signaled, "Pleasant voyage."

Our first port was Bahia, in Brazil, where we arrived after a passage of thirty-two days. It seemed to be a thriving place in a way; but our time was short, and we stayed there only the four days necessary to get coal and provisions, so impressions were rather superficial. Of course, four days in port did not mean four days on shore. The incident that three of us seemed to recall most clearly in after years was a drive behind a four-in-hand in a very rickety conveyance, which was brought to an ignominious end by the coachman who, wishing to show off, came down the steep street to the shore at a gallop. Those ponies seemed to get a little beyond control and, when finally checked, instead of stopping quietly wrecked everything. The poor man's relief was so apparent upon learning that we would remunerate him that we thought it was a pretty good day's sport after all.

On July 14 we made sail and glided out of that fine bay—the Bahia de Todos os Santos. On July 15 we began to experience a remarkable variety of weather, heavy gales and light breezes alternating in a way that was disconcerting enough. By that time, however, knowing our ship and her rigging, we were able to "crack on" in a way not usual in an ordinary passage, and the twenty-first day out saw us at anchor in Table Bay. We had an experience one night that was talked about for some time. It happened in my watch. We were bowling along under all plain sail to royals, except the jib and spanker, with the wind on the port beam, making ten knots; it was dark as pitch. Suddenly, toward the end of the watch, I became conscious that, without time to think why, I had just sung out the orders, "Let fly to' gallant and royal halyards! Stand by

the topsail halyards! Main topmast staysail downhaul!" Before the orders could be obeyed there was a lull and a perfect calm; the light sails were just in when out came the wind butt-end first from the southward—the old lee beam—with a force calling for double-reefed topsails; the square sails were backed flat against the masts and rigging, and the ship gathered sternboard, while some sparks flying forward told of what our big, main, topmast staysail was doing to the galley smoke pipe. That was an immense four-cornered staysail specially made since we left home, built up on the original three-cornered one, and hoisted on a special stay leading up to the main topmast head from some fifteen feet above the partners of the foremast. Directing the forward part of the watch to take care of that staysail, I got the rest at the braces, the yards pointed to the wind, the topsails lowered, and the mainsail off her. The wind fell a little and we finally went ahead close-hauled on the starboard tack under reefs. It was a most extraordinary flurry. We were then about abreast of Tristan d'Acunha, which was somewhat noted as a squally region.

At daylight on August 5 the flattened top of Table Mountain was sighted, and in a few hours we anchored in Table Bay, going into the Alfred tidal basin as soon as the tide served. It is these wet docks that have made Cape Town a possible port; a vessel at anchor in Table Bay would not be at all safe, especially in that winter season, as severe gales from the northwest from which there was no protection might arrive at any moment.

We remained twelve days at Cape Town, and enjoyed the visit very much, the greatest kindness and hospitality being lavished upon us. Sir Henry

Barkly, Governor of the colony, gave a dinner to Captain Chandler and the chiefs of the scientific parties, at which were also members of an English Transit-of-Venus expedition, together with some of the principal civil and military officials; after the dinner Lady Barkly held a reception and the spacious rooms of the Government House were filled with a most delightful company. As Sir Henry and Lady Barkly were in mourning there was no dancing but a feast of reason and flow of soul, which consisted of charming conversation and vocal and instrumental music by accomplished amateurs among the guests. There were some excellent voices, the possessors of which also had most engaging personalities.

That English Transit-of-Venus expedition had arrived about a month before we did, bound for Kerguelen Island where we were to leave a party also. Their ship, the *Encounter,* had been disabled by an accident to her screw and they were hopeful that Her Majesty's ship *Volage* would come and take them. Naturally they fraternized very cordially with our own Kerguelen party.

There were opportunities to see something of the immediate outlying country. A glance at an ostrich farm was interesting, there being a score or more birds pasturing in a meadow. We were told that they commanded a price of about £70, which is really not surprising when one learns further that the cost of keeping a flock is small and that each bird yields from £30 to £40 worth of feathers each year. The cost of keeping them from straying is curiously limited by their peculiar mental trait which causes a fence a foot high, or even a fallen log, to become an impassable barrier; they will not step over it not-

withstanding the length of their legs. Their eggs make a fairly good omelet. But one must be careful while handling the eggs; one fell in my little room, and the place seemed to be about an inch deep in egg.

Another interesting jaunt was a visit to the High Constantia farm, containing vines from which the finest of the Constantia wines are made, and where we were most hospitably received and entertained. The industry there furnished a curious illustration of the dependence of one part of the world upon other parts; while producing an exceptionally delicious wine, they were always afraid of running short of bottles and were glad to buy any kind at five cents apiece.

A political campaign for a seat in the Colonial parliament, which was very vigorously conducted, was going on during our stay in port. The two principal candidates were Messrs. Cloete and Bam; the former was the name of one of our hosts at the High Constantia farm; but whether it was the same person or a connection I did not learn. Some of the details of the way they fought might give points to some of our superbosses. Mr. Cloete's friends had some placards printed bearing the words, "Vote for Daniel Cloete;" but as soon as they were posted Bam's adherents had some slips printed with the words "J. A. Bam," which they pasted over the Cloete placards in such a way as to make them read, "Vote for J. A. Bam." To this Cloete's supporters replied by having the letter "u" printed on some small slips which they pasted over the "a" in Bam's name, making the placards read, "Vote for J. A. Bum." The election was held while we were there, resulting in Mr. Cloete's election by a large majority.

On August 17 we hauled out of the tidal basin, steamed out clear of the land, and made sail bound for the Crozet Islands in latitude 46° 15′ south. As we made southing, storms and rough seas began, occasional fine days being duly punctuated with heavy squalls. The snow squalls were peculiarly ominous in appearance, and at first we would shorten sail to them with nervous promptness, but in time we learned that they were mostly snow with little wind. It remained for us to learn by experience how to distinguish them from the more frequent, heavy wind squalls.

We sighted Hog Island, the westernmost of the Crozets, on August 30; a more desolate-looking region is hard to picture. Possession Island, which was intended to be the observation station, was about forty miles farther eastward, and by noon we were almost midway between them; but the wind began to increase and was soon blowing a gale from the southward with rain and snow and mist. For several days we battled for an opportunity to land, but without avail. One night, lying-to under storm canvas and steam, we drifted thirty-seven miles to the northward. On the following day, the wind having abated, we got fairly close-in and found shelter and smooth water in America Bay, on the northeast side of the island, and anchored for the night. Before morning the wind had gone to the northwest, beginning to blow hard, and as that bay is open to that direction we had to weigh and put to sea. The best anchorage, in fact the only one shown on the chart, was Ship Bay, a small pocket in about the middle of the southeast side of the island, landlocked and well sheltered except from the southeast. That was where it had been hoped to establish the station, and, when

forced to get under way from America Bay, we proceeded to it, fully expecting to find shelter and favorable conditions for landing. But the wind drew around the island so that the lee was very imperfect, and no boat could have lived in that sea. It blew a gale all day, and night came on without any prospect of its abating; so we lay-to all night, and by morning had drifted some thirty-odd miles to the southeastward. It was evidently too early in the season. Three months later the weather conditions would be better, that being the time when the sealers come there to pass some three months in huts on the shore. But the storm had not abated in the least, and no one could venture any opinion as to when it would abate. The expedition was pressed for time, and if we lingered longer there it was clearly at the risk of causing the New Zealand and Chatham Islands parties to reach their stations too late. So it was decided to give up the Crozets and stand on to the next station to the eastward, Kerguelen.

Being in latitude 49° 40′, or about three and a half degrees farther south than the Crozets, it might be expected that the weather would be worse as we proceeded; but that could not well be. In actual fact when we came in sight of the mainland of the island, the weather had improved greatly, and during the night we lay off and on off the south shore. When morning broke we stood in under steam to a mile from the shore and coasted along it into Royal Sound. The scenery was wild and grand—bare and rugged mountains, six thousand feet high, frequently terminating in vast precipices hundreds of feet high; here and there were huge masses of rock which had been split off; and in places the cliffs had been worn away forming caverns and sometimes blowholes

through which the surf spouted fiercely. Even color was not lacking, metallic oxides producing striking tinted streaks here and there.

The Sound is a magnificent inlet some six miles wide but of unknown length, never having been surveyed; sealers had explored about twenty miles of it. We ran eleven miles up it, finally anchoring in Three Island Harbor, where there was a whaling and sealing schooner, the *Charles E. Colgate* of New Bedford. On the next day, a smaller sealing schooner, the *Emma Jane* of New London, came in from a watering place on the other side of the Sound; her captain, seeing us come in, was impelled by curiosity to find out who and what we were. Both schooners had been in those waters for two years, and as they had not heard from home for over a year they were glad to get what newspapers we had.

Those whalers said that the best locality for an observing station in that neighborhood would be near the watering place at Molloy Point about seven miles distant across the Sound, and the Captain of the *Emma Jane* agreed to pilot the ship over there. So there we went one morning, anchoring about three-quarters of a mile offshore. The Point is a bold, steep promontory forming the western side of a shallow bay, a chain of hills beyond it rising to perhaps one thousand feet, and in rear of them are the lofty, snow-clad peaks of a mountain range. Through a cleft in the hills a stream came tumbling down, making a picturesque spot and furnishing excellent water for the whalers' casks.

A search was immediately made for a suitable place for the observation station, and Lieutenant Commander Ryan, chief of the Kerguelen party, decided to locate it on a kind of terrace about halfway

up the southwestern face of the Point, the only tolerably dry place discovered. The work of landing the outfit was then immediately begun and pushed with no delays except those occasioned by bad weather. But that gave us a good deal of trouble. From early morning until the middle of the afternoon it generally alternated between sunshine, fierce squalls of wind, and rain and snow, and one evening at sundown the wind freshened to a severe gale without any warning, attaining its height in fifteen minutes. All our boats were down, and many officers and men were on shore, but fortunately they all got on board safely. Several boats were lost, one being a steam cutter which was a small but ponderous thing and of little use. I was rather glad to see it go. The ship herself dragged about half a mile, and it was only by veering to one hundred and twenty fathoms of chain and letting go a second anchor and steaming against the wind that she was brought up again. On the night after that there was a remarkably brilliant and beautiful Aurora Australis which lighted up the southern sky in vivid streaks. Such contrasts were continually surprising us.

In the organization of the work for disembarking the outfit my duty was to take charge of the boats, and I had an opportunity to admire and really wonder at the endurance and skill of the men from the whaling schooner and at the lightness of their boats. We got them to help us, of course, and their assistance was invaluable. Indeed, while our men were a fine lot of seamen, experienced in their work on board a deepwater ship, we felt inclined to hide our 'minished heads in the presence of those whalers, trained to perfection by constant practice in their one activity. It seemed strange, too, that their whaleboats

should be so much lighter than our ceiled service boats; but theirs were hoisted in and out in canvas slings and had but the one kind of work, and this work did not require heavy construction.

The officers stationed at the shore end of the work very soon discovered immense quantities of large mussels, of a peculiar, pinkish color, which, after the first doubting taste, proved to be a welcome addition to our seagoing fare—generally roasted or steamed. We also had one or two good sportsmen, notably Lieutenant John J. Hunker, who came across some ducks and, having a shotgun, made that additional variation for our table. There were other birds there to enliven the scene, such as petrel, gulls, albatross, cape pigeons, etc., but what caused the liveliest merriment were the penguins. They are classed as birds, presumably because they have wings, but those wings are without quills and are used only as paddles, by means of which they can swim with amazing swiftness. They cannot fly, and on land can only waddle in dignified helplessness, often in quasi-military formation.

On September 13 the observing party finally left the ship. A salute of five guns was fired as a compliment to Commander Ryan, and the ship stood down the Sound and out to sea.

For some days the weather remained much as before, cold with frequent snow squalls and continuous gales. But toward night on September 22 the wind and sea began to go down, and as we made a little northing the temperature, which had been ranging between 30 and 40 degrees, rose to 50 degrees. Kerguelen lies in about latitude 49° 40′ South, and the southern end of Tasmania is in 43° 38′. The state

of the winds and sea, however, is affected by the proximity to land. On September 24 we set studding sails for the first time since leaving the Cape of Good Hope; on September 30, we were only two hundred and seventy miles from port, and, as the wind had fallen to light breezes, and we had coal enough to steam that distance, we started fires, and on October 1 dropped anchor in the Derwent River off Hobart Town.

It did seem very peaceful and pleasant there, the charm of pretty scenery adding to the soothing effect of beautiful weather and still waters. We were instantly made the recipients of every courtesy from both official and unofficial circles. The first things to be done were to select an observation spot for Professor Harkness's party in or near Hobart Town, and to find a suitable place for the Crozet Island party of which Captain Raymond of the Army was chief. This latter party was finally located at Campbell Town, eighty-one miles north of Hobart Town. In the meantime, the outfits were being landed and housed in the Ordnance Stores, where the Government permitted them to be deposited for future distribution, in order that the ship should be free as soon as possible to proceed with the two remaining parties.

So we were able to get away on October 9 bound for Bluff Harbor, New Zealand, where we arrived on the morning of October 16, after a passage of what we were beginning to call "the same old kind." Here Lieutenant Bass, of the Army, reported to the chief of the party, Dr. Peters, he having come out by passenger steamer and having spent a month in examining different localities. As a result of his inspections Dr. Peters decided to locate his party

at Queenstown, a village in the interior about one hundred and twenty miles from Bluff Harbor, because it was freer from clouds than any other part of the island. Work was immediately commenced and the outfit landed, and on October 17 that energetic ship put to sea again, bound for the Chatham Islands.

The Chatham Islands, some five hundred and fifty miles east of the southern part of New Zealand to which they belong, were most uninviting-looking, though somewhat picturesque in their apparent barrenness, viewed from the westward as we approached. As the only communication with the outside world was by the monthly trips of a little schooner, the *Magellan Cloud,* to and from New Zealand, there had never been occasion for much surveying; our charts were very inadequate; and there was not much information available from other sources. Upon our arrival, on October 19, we hove-to off the little settlement of Waitangi, on the main island of Whairikauri, hoping that some one might come off and pilot us; but no one did come. Therefore, we stood on up the coast a few miles and entered Whangaroa Bay, sometimes called Port Hutt. As we felt our way in I found myself admiring the cool way in which Captain Chandler conned the ship; standing on the forecastle, watching the color of the water and noting the appearance of the shores as indicating clean or foul ground, and putting the helm one way or another in accordance with his practiced judgment, he brought her to anchor conveniently near the shore but with good depth all around, as was determined afterwards by taking soundings from a boat.

So that I may not seem to exaggerate the per-

formance of the ship in making the passage from New Zealand in apparently less than two days, I must say here that the 180th meridian passes between New Zealand and the Chatham Islands; therefore, ships bound to the eastward gain a day there. We actually had two October 19's.

As the only industry on the island, the only *possible* one, I should say, was wool-raising, the settlers, some one hundred and fifty in number with perhaps a few natives, mostly Maoris, were all ranchers. They came on board and invited us to their homes in the most hospitable manner, placing their horses at our disposal, that being the only means of transportation. As soon as the observation spot had been decided upon by the chief of party, Mr. Edwin Smith of the Coast and Geodetic Survey, and the work of landing the stores was organized, several of us availed ourselves of the invitations. I think some of my dear messmates were guilty of putting up a joke on me. There was a large pony, named Koomera (sweet potato), well known as the fastest on the island but possessed of such a temper and "will to win" that he would get too excited in their races and ruin his own chances by trying to stop others. Several of us organized a cavalcade to visit three of the ranches which were some fifteen miles apart, intending to pass the night at one of them. I was unable to get away during the first three days, but it was arranged for us to start on the fourth morning, the people who provided the horses being advised, by all means, to put Koomera at my disposal, as I was fond of riding. We made the start, and Koomera struck out; our hosts advised the rest of the party not to try to race, so they lingered behind, but Koomera apparently mistrusted them and never slack-

ened his speed until we arrived at the first ranch. It was a lonely ride; but fortunately that horse not only knew the way but picked the proper footing between bogs and peat beds. So I arrived all right. The good people of the ranch were a little surprised at seeing me all alone; but I told them who I was, and said I supposed the others would be along in a day or two. Then they recognized Koomera and understood.

These ranchers were hospitality itself, and we enjoyed the outing immensely. The staple article of food, of course, was mutton. It was said that there were thirty thousand sheep on the island; and the pasture grounds, with luxuriant grass and trees, and picturesque little hills, were much more attractive than the vicinity of Whangaroa. Each residence had about an acre of ground under cultivation for vegetables and strawberries and gooseberries, all of which were very good. Everything else was imported. There were a few cattle that furnished real country milk. One of our hosts inducted us into a novel refection. Giving us each a tumbler with a little whisky in it, he led us to an inclosure where there were some cows evidently ready to be milked, and we were invited to milk them into our respective glasses. "Hold the glass in the left hand and milk with the right," he said. I decided to begin with both hands until I should get the knack of it, which I finally accomplished, soliloquizing that that was something I had never expected to learn by going to sea.

We passed the night at one of these isolated "runs" as they were called, returning to the ship the next day. All my rides were lonely, like the first one; but I benefited by it in an unexpected way; the easiest gait for riding is a *ventre-à-terre* gallop,

Koomera's specialty, and upon the completion of the fifty-odd miles in the saddle, I was apparently much less stiff than my companions, who had been making the stages more deliberately.

Among the few colonists on the island other than English was one American who had been shipwrecked there some thirty years before and had never tried to get away. On one occasion, when opportunity offered, he had made preparations to leave, but when the time came to embark his heart failed him and he said, "No, I will not leave the old woman." The "old woman" was a native who had saved his life in the early days, and whom he had married. His name was Tennant, and he was connected with the family of that name—well-known livery-stable keepers in Newport, Rhode Island. I remembered his name well, and he remembered ours. A couple of years later I was glad of an opportunity to give news of him to his relatives.

With the landing of that party on Chatham Islands, the main object of the *Swatara's* cruise was accomplished, the last party having been landed with six weeks at their command for setting up the instruments and making preparations for the observations on December 8. Our work was far from entirely completed, however; we had yet to make several passages back and forth between ports of New Zealand and the Chatham Islands for the special object of carrying meridian distances to establish the longitude of the latter station. For this purpose we had brought out from home thirty-three chronometers which were very carefully placed in the ship with a view to their being subjected to the least possible amount of motion. The longitude of Dunedin, on the east coast of South Island of the New Zealand

group, being well established, we would go to Port Chalmers, the seaport of that city some six miles down the river from it, and, by the electric "tick," the navigator would get the exact error of those chronometers and carry the time to Mr. Smith's party. Then we would run back for another "tick," so that the Greenwich time given at the station at about mid-interval between the two "ticks" would be fairly correct.

Dunedin, easily accessible from Port Chalmers, was a pleasant place to visit. One evening Mr. Driver, the American consul, and Mrs. Driver gave a ball in our honor which was not only a handsome entertainment but delightfully gay and pleasant, and we were easily detained until well-nigh dawn.

An amusing incident occurred during one of our visits to that port. One afternoon a large ship was seen away down in the lower reach, being towed up and flying a signal. That signal, according to our International Code, meant "Armed assistance required immediately." Without stopping to consider our legal right to interfere in a foreign port, the second whaleboat was called away "armed and equipped." That was my boat. I jumped in, with my side arms, and we raced down before a strong ebb tide. Coming near to the ship, which was being towed at five or six knots an hour, I turned the boat to head with her, sheered in carefully and dashed alongside. The bow oarsman seized hold of the fore chain plates; then, followed by the crew, I clambered up and over the side. I do not remember ever having seen such astonishment as was shown by the captain and people of that ship when we dropped down on her peaceful deck. I could only point to that signal and iterate "Armed assistance required imme-

diately." Then explanations followed. It was an old private signal to their House in the port, which they had used for years, and the existence of the same hoist of flags in the New Code had not been noticed. They were very sorry, and made what amends they could; they towed us back in that strong ebb tide to the anchorage. That ship was one of the prettiest craft I ever saw; she was one of a line, all painted a flesh color, that plied regularly between England and New Zealand, going out past the Cape of Good Hope and returning round Cape Horn with cargoes of mutton and wool.

We had time and occasion to visit Hobart Town again, and were so fortunate as to have two months there, every moment of which seemed to pass delightfully. While the weather before and during the day of the transit of Venus was execrable from the point of view of the observers, because of clouds, fogs, mists, rain and everything that could interfere with observing, it was not unpleasant in its effects upon pastimes such as visits, rides, races, picnics, dances, etc. A peculiar product of that country is the large and delicious cherry; it grows on low trees, and it came to be a commonplace incident to pay a visit of an afternoon and be invited by the hostess to take a walk in the garden; then, while walking, one would reach out casually and pick a cherry and really have to make two bites of it. The strawberries also were superb; and at the end of the cruise I gladdened the hearts of several friends at home by presents of a jar of Tasmanian jam.

The transit itself was a sad disappointment, clouds and rain and flying scud interfering to such an extent that only occasionally during short breaks could any photographs be taken. Just before the planet passed

off the sun's disk, during about half an hour, there was a good view and a number of exposures were made. During that time also we all used pieces of smoked glass and were greatly interested in seeing that round ball of such material size that its sphericity could be appreciated.

Captain Chandler was able to make some little return for official courtesies shown us by offering to take the Committee of the Ministry to Port Arthur for their annual visit to the State Prison there. It is fifty miles from Hobart Town, and the Committee usually went there in the Government schooner, the voyage taking from six or eight hours to several days, depending on the wind. Captain Chandler's offer was gladly accepted. Van Diemen's Land was a penal settlement; and it was with the intention of doing away with the unpleasant associations that, when England ceased sending her hardest criminals there, the name was changed to Tasmania. The substantial buildings were interesting to look at, situated on a peninsula, joined to the mainland by a narrow neck which was guarded by policemen and by a line of ferocious dogs chained to stakes so arranged that no person could pass without coming within their reach. But there was little life there at the time of our visit, as there were but few who had been transported from the mother country, and there was little crime in the colony.

We gladly broke into the gay times in Hobart Town to go on an errand of humanity. There was a good deal of anxiety concerning a German Transit-of-Venus party which had left Melbourne in the beginning of October in the French barque *Alexandrine*, bound for the Auckland Islands, in latitude 50° 30′ and somewhat to the eastward. It had been under-

stood that that barque was to make one or two trips between the Aucklands and New Zealand, but nothing had been heard of her. The German Consul at Melbourne had telegraphed to Berlin and had written to Captain Chandler on the subject. As a result of the correspondence the Captain decided to look them up, and on December 18 we put to sea, having taken on board a heavy deckload of coal besides filling the bunkers. The passage was a pleasant one, and on December 23 we made Enderby Island early in the morning and in the afternoon came peacefully to anchor in Sarah's Bosom harbor. Many years before, an American merchant ship had been there, the captain having his wife and budding daughter with him. The gentle swell heaving in moved the mother to say that it was like Sarah's bosom, and the skipper gave it the name.

The missing party were all right, in good health and spirits, and greatly surprised by our appearance. They had also been very fortunate in getting observations of the transit, although there had been much bad weather. We remained there a couple of days on account of the weather outside, during which time the *Alexandrine* came in from Bluff Harbor. There was a little shooting of water fowl, but our prize acquisition was a young seal, just born; a seaman, Jim Sheehan, had unwittingly killed the mother, but had saved the baby and brought it on board where in time it became a great pet, floundering about the decks and emitting its peculiar, seasick cry. Unfortunately some months later it lapped up some arsenic left on deck by the surgeon of the ship who had been stuffing an albatross. Jim Sheehan was positively inconsolable.

On Christmas Day we put to sea again, the direc-

tion of the gale having changed, and after a rough passage we arrived at Port Chalmers. Staying there just long enough to compare chronometers with Dr. Peters at Queenstown, we stood over for a last visit to the Chatham Islands to give one more correction of the time for the computation of longitude, and to bring away the party and their apparatus.

Mr. Smith had had wretched luck in weather, being able to secure only thirteen photographs, and the party were naturally somewhat depressed. They could truly say "Love's Labor Lost" after the discomfort of all those months of storm at sea. One assistant had died early in the voyage, and a photographer had gone insane in the gales off the Crozets and had to be transferred to a retreat when we reached port.

After embarking everything we stood away for Port Chalmers. The owner of Koomera very generously offered to give him to me if I could take him away; but, of course, that was not possible. After a final chronometer comparison we proceeded to Bluff Harbor to get the outfit of that station, the members of the party returning home by passenger steamer. Dr. Peters had been more fortunate than any other party in the Australian region, having had a clear sky during most of the transit, the result being two hundred and thirty-seven good photographs. From there we went on to Hobart Town for the Tasmanian parties.

We could but be delighted to visit that charming spot once more, and the three weeks that it took to close up everything were greatly enjoyed. We gave a ball on board one night, taking two days to prepare for it. With such a profusion of flowers as exists there in summer, aided by flags and bunting and

everything that the ship could supply, the scene could not fail to be striking; the Botanical Garden even sent a great number of potted plants; and by hoisting a big cask up into the main top, and filling it with water and fitting it with a hose and small nozzle, a very neat, little fountain was rigged on the quarter-deck. That episode has lingered pleasantly in the memories of all of us; thirty-three years later, when I chanced to visit Sydney and Melbourne, I was vastly pleased at meeting several friends who, in the meantime, had left Hobart Town but who remembered well the *Swatara.*

Before beginning the long voyage home around Cape Horn it was thought advisable to put the ship in dry dock to examine her bottom as she had grounded lightly once at Bluff Harbor. Since Melbourne was the nearest port offering the facilities, the ship proceeded to it upon leaving Hobart Town.

I was left at Hobart Town, however, on a peculiar mission, to rejoin the ship later at Melbourne. The hardships, incessant exposure and apparently unending work during seven months would not so strongly affect the sailormen of those days as it would those of the present day, accustomed to a so much easier standard of living. Yet it is only natural that our men were easily susceptible to the allurements of a change, particularly when the change would bring within their horizon a region which still possessed the imaginary charms of the Australian continent. Consequently, it was not a matter of surprise that there were a good many desertions. The mere fact of the ship having no battery, no doubt contributed somewhat to the disorganization; for, while such other drills as were possible were carried on, the mustering at the guns every day has a salu-

tary influence upon discipline. The Captain thought that a good many of the deserters would soon be out of funds, and, with a little energy, an officer remaining behind might very possibly round up a few and bring them to Melbourne; so that was decided upon and I was given orders to remain for the purpose.

It seemed a rather unusual sphere for me to embark upon, and my first care was to form an alliance with a detective of the regular police force. I got to know him quite well, and he seemed an incarnation of the cold-blooded, heartless detective to be found in the pages of certain old English novels; and yet that man's home, with a good wife and a modest, pleasant daughter, was genial and attractive. I did not greatly relish some of the company I had to keep to meet with that detective's suggestions as to the best procedure, and it became apparent also that my presence had become known and that what few of the men were still in Hobart Town were keeping close. So I decided to make a conspicuous departure. My detective friend approved of that and said that I would better change my rig also when I came back. I had been occasionally posing as a mate of a whaler that had recently put to sea. I had a full beard, which was not as unusual then as now, and I kept it roughed up. But he said, "You can't do the blackguard, sir. You'd better try the sick gent from Melbourne." While feeling beholden to him I did not think I could "do the sick gent" very well, being in the pink of condition; but I thought I could make myself unrecognizable.

So I engaged a seat in the most conspicuous part of the stagecoach that left Hobart Town every day toward evening for Launceston on the north shore of Tasmania, whence there was frequent steamer

communication with Melbourne. When a good ten miles out of town, I left the coach and toward midnight I walked back. On the next morning I ventured out, wearing a long, linen duster and blue goggles, with my beard trimmed down to a point, carrying a cane, and limping slightly. The disguise was effective; I tested it by going in the afternoon to the races where I saw a number of acquaintances, and not a soul recognized me—unless dogs have souls. A dog belonging to a family with whom I was on pleasant terms sniffed at me in a startled way and then joyously jumped on and about me until I had to beat a hasty retreat. In this way I got two of the men—fine men. I was very sorry for them. I secured passage in that same stagecoach for us three and a burly bobby to whom I offered passage free to Melbourne, where his mother lived, and back if he would help me guard the men. As a matter of fact, however, I would have trusted myself entirely to those men after advising them not to raise a row or it would go harder with them. They said most of the others had got away before the ship sailed.

That was an inspiring ride; four horses, plunging madly on (it seemed to me) through the dark at a full gallop over the smooth, convict-made, macadam road, and changing horses every hour. Upon reaching Launceston I felt rather more uneasy than at any time, because, it being the season of races, there were many gamblers and hard characters going back and forth, and if those prisoners of mine had been so disposed they undoubtedly could have gotten away. But we reached Melbourne without difficulty; and after the two men had paid their expenses and mine and that bobby's, there was not much more done to them. I think that when they saw how easily

we found, and enlisted for the voyage home, able seamen who had yielded to the lure from other ships and had become disillusioned, they realized that they had gotten out of it comfortably.

When the ship was docked it was found that the false keel was rather badly chafed and several sheets of copper had been stripped off. All that was soon repaired, a lot of stores laid in, and on March 1 all hands were called "Up anchor for home!" A ninety-one-day passage it was to New York, broken by a four-days' stop at Barbadoes; and the quantity of stores laid in seemed to bespeak sumptuous living during the passage. But the food available for ship use in those days was still of a distressingly unappetizing kind. The principal canned meat was a nauseating mess known as "soup and bully," being a French preparation of *bouilli* which, with a French chef to prepare it for the table, might have been made very palatable; but, as it was, it was beyond me, and on long passages my meals were very frugal. During that particular voyage round Cape Horn my stand-bys were hardtack, splendid mealy Australian potatoes, and Tasmanian strawberry jam; with these and a little ham I got along very well.

In a voyage of that length a ship goes through all kinds of wind and weather. Off Cape Horn, which we sighted, we went flying by with a topmast studding sail set; but one night later, in the vicinity of the Falkland Islands, the wind nearly reached hurricane force for a couple of hours. A month after that, when nearly on the equator, it was so calm and the ship so motionless that I went overboard for a swim. After getting "permission to leave the ship" and putting on bathing duds, I called the Cap-

tain of the main top and asked him to keep a lookout and be ready to throw me a heaving line if he should see any cat's paws coming up. Then I dove off from the starboard gangway and had a good swim; the ship with her masts and sails did seem extraordinarily lofty when viewed from the surface of the water. But soon the man beckoned and called to me rather peremptorily, "Better come aboard, sir! there's a breeze." I swam alongside quickly and clambered up the gangway cleats and looked around and asked, "Where's your breeze, Simonds?" He replied, "No, sir, there's no breeze; they told me there was a big barracouta on the port quarter, and I thought you might get galleyed if I told you that." I went to the port rail to have a look and after seeing that vicious fish, then crossing under the stern, I gripped Simonds's hand cordially.

While yet in the South Pacific, one of the men, Tom Maloney, died of pneumonia. He was one of our best helmsmen. We hove-to with the main topsail aback, called "All hands bury the dead," read the funeral service over the body and consigned it to the deep; and then filled away and sped on as if forgetful.

We arrived at New York on May 30, having been away one week less than a year. During that time, in a voyage around the world, we had been at sea two hundred and forty days and had sailed some forty thousand miles, much the greater part of which had been in storm winds and rough seas. I could not wish any one better luck than always to be on board as excellent a seaboat as the *Swatara*. It was certainly one of the happiest cruises I ever made.

I did not know at the time that that was my last

voyage in a sailing vessel. I should have been saddened by the thought; though, as it turned out, it was also my last watch-standing cruise; as navigator or executive officer or in command there would not be the same sporting pleasure in that type of ship.

## CHAPTER V

### SUBMERGED CONTINENT IN THE ATLANTIC—SERVICE IN THE MEDITERRANEAN

Furloughed—Toulon—Stationnaire at Constantinople—Ancient Troy—Resumed hydrographic work—Italian waters—Desert of Sahara—Malta—African coast—Thermometer at 130°—Paddle shaft broken—Reach Alexandria, Egypt—Passage to Toulon with one paddle wheel—Gibraltar—Detached and ordered home.

In the autumn of 1875 I found myself under orders to the Hydrographic Office, in Washington—my first shore duty. I wondered how I would like it. It was not at all confining, however, as the hours were very easy in those days. The work was professional, consisting of compiling Sailing Directions for different regions, from such data as could be obtained. Our Hydrographic Office was still a very modest affair. It seemed difficult to inaugurate the procedure by which our Navy should be made independent of other navies for its supply of proper nautical information for our own ships. My friend Gorringe was also on duty there, and engaged in work of the same nature.

Apart from the professional work, I was interested in getting in touch with the city of my birth, to which I seemed a stranger. My mother died in Sweden when I was a child, and we had never returned to Washington for any material length of time; the Seaton family had nearly all passed away and others

were taking their place. There were a few of the old families left, however, and they soon extended my acquaintance. Thus winter and the early part of the summer passed pleasantly, until suddenly I was detached from all duty and placed on "furlough," the peculiarly distinctive feature of which was that the pay was one half of "leave" pay, which in turn was about three quarters of shore duty pay. A few days before that I had been called before the committee of the House which was investigating the conduct of affairs in the Navy. To my great astonishment I was very closely questioned on certain matters of which I knew absolutely nothing, and I expressed my astonishment to Chairman Whitthorne of the committee who finally told me that a conversation of mine had been reported to him. I asked him with whom I had had the conversation, and he told me in confidence. There was some very strange mistake about it all. But then the committee put to me the routine blanket query as to whether I knew of anything illegal that had been done; and unfortunately I did know of one minute infraction, which, however insignificant, I had to mention. My order of detachment was made out as soon as my testimony appeared. A number of others suffered in the same way and with the same remarkable coincidence. The reason given to Congress for the unusual procedure was that the funds for the pay of the Navy were giving out. The difference between furlough pay and leave pay was made good to us some time afterwards by Congress. At the same time a law was passed prohibiting the furloughing of any one except by sentence of a court-martial.

After several months of that anomalous situation, my friend Gorringe told the Department that there

was a great dearth of data from which to prepare Sailing Directions for the Mediterranean, and at his suggestion it was decided to fit out the *Gettysburg* for the work of examining the coasts and islands to obtain the necessary information. He was assigned to the command. The ship, an old, English, iron paddle-wheel blockade runner of one thousand tons, captured during the Civil War, was at the Washington Navy Yard. When she was nearly ready for commissioning and the Secretary of the Navy was out of town, Gorringe applied to have me ordered as Navigator, which was done. The ship was commissioned, and the friendly Chief of Bureau whispered to Gorringe. "Now, get outside the Capes of Virginia." One thing that favored our speedily putting to sea was that the allotment for docking and examining ships was slender, and as the ship was thought to be in good condition, neither time nor money was spent in making sure. So we went to sea without proper inspection, which resulted in much expense later besides skinning close to disaster.

In this way commenced a cruise not devoid of interest. We stopped at Halifax and the Azores, the latter visit being of special interest because it was out of the beaten track. I actually found by my chronometers that the clocks were about twenty-five minutes out, there having been no vessel in there for some time. We set their clocks for them, and proceeded toward the Strait of Gibraltar; before reaching there we made the interesting discovery of a submerged mountain rising from the ocean depths.

It was planned that we should take some deep-sea soundings during the voyage across, and we were equipped with a Thompson sounding machine—quite a new thing in those days, with the piano-wire line

and detachable 60-pound sinkers—for the purpose. Rough weather interfered with more than a few soundings at first; but after leaving Horta, in the Azores, on November 6, we sounded at regular intervals finding such depths as were to be expected. On November 16 a variation was introduced. At 5 A. M. we found 2,751 fathoms, and at 11:40 only 1,640 fathoms; so another cast was taken at 2:40 P. M. with 734 fathoms. The next cast was deeper, 959 fathoms; so we turned and headed back and got 582 and 401 fathoms in succession. Night coming on, we stopped and lay-to during the night. Beginning bright and early the next morning we first sounded in 1,054 fathoms, and then in 604. By heading eastward until it deepened, westward until it stopped shoaling, northward until it deepened, then southward, and so on, we worked our way to the summit and anchored the ship there for the night in 33 fathoms, 130 miles off the coast of Portugal.

On the next morning, we anchored a boat to serve as a beacon, and ran radial lines of soundings from it in all directions to establish contours, being careful to be close to the boat at noon for noon observations for latitude, the observations for longitude being made in the morning and afternoon. At the end of the day the boat was picked up and a course shaped for Gibraltar, the plan being to fill up with coal, correct the chronometer errors, and come out for another survey.

We were all greatly interested in this discovery, especially as, in the specimens of the bottom brought up in the sounding cups, there were pebbles rounded as by the action of surf or weather, showing that that eminence had been above water at some time. We afterwards learned that among the specimens

recovered were pieces of live, pink coral. A further peculiar interest attached to the discovery was in reference to Ignatius Donnelly's book *Atlantis,* in which it is sought to prove that there once existed in the Atlantic Ocean a continent known to the ancients as Atlantis, from which region man first rose from a state of barbarism to civilization. In editions subsequent to the date of our discovery Donnelly quotes it as corroborative evidence of the prehistoric existence of that "lost Atlantis," and of the truth of Plato's statements that "beyond the Strait where you place the Pillars of Hercules, there was an island larger than Asia [Minor] and Libya combined" and that "in one day and one fatal night there came mighty earthquakes and inundations which engulfed that mighty people." I must add that we received a congratulatory message from President Grant.

With chronometer errors well established, we returned to the bank and devoted two more days to surveying that mountain top and establishing its geographical position. Before going out, however, we were delayed a couple of weeks by another curious discovery, which was nothing more nor less than a hole about two inches in diameter in the ship's bottom. Apparently it had been there some little time, and was not discovered because there were certain bilge pumps permanently connected with the main engines which evacuated any water there might be in the bilges whenever the ship was under way. With the ship at anchor and the engines stopped, the water began to rise in the bilge. "First aid" treatment was given by getting a sail under the bottom to check the inflow of water, and then putting a thick layer of cement and sand over the vicinity; with that pre-

carious bottom we went out for the second examination of Gorringe Bank.

That condition of the hull, however, required more permanent correction than a barrel of cement, so we had to make our way to Toulon and go into dry dock where the naval constructors of that Arsenal made thorough repairs. The ship's bottom was truly a sight! Plate after plate had to be replaced; the constructor in charge while making an inspection broke off a piece of the old skin the thickness of a teakettle and shrugged his shoulders, saying, "*Vous autres Américains, vous êtes gens pratiques.*" And I judged from his expression that in using the word "pratiques" he had in mind the meaning "practical" rather than "experienced."

Lying in the roads at that time were a number of fine French ironclads, the *Escadre d'Evolutions,* commanded by Vice Admiral Jauréguiberry who had recently declined the post of Secretary of the Navy, saying he was a sailor and in case of war he would prefer fighting his fleet to sitting in an armchair in Paris. Fighting his fleet was always uppermost in his mind—with apparently always one particular enemy in view. I found the Chief of Staff to be Captain Peyron, who had commanded the flagship *l'Astrée* in the Pacific when I was Captain Preble's aid in the *Pensacola.* When I went to pay my respects to him, he recognized me at once and was most cordial. Indeed he invited me to go out with him in their flagship for their next battle maneuvers, which I would have been delighted to do but was prevented by the completion of our repairs. I was greatly enthused over those ships, as I was taken into every nook and corner of them. They undoubtedly were fine for their time; but in writing to my father about

the *Trident* and the *Victorieuse* which were just being completed, I added, "The keel has just been laid of another to cost about two million five hundred thousand dollars." What would be thought now of a little vessel costing only two and a half million!

When we emerged from that Navy Yard the ship seemed to be in pretty fair shape, and the active work of examining the coasts and islands of the southern shore of France was immediately commenced. But before a month had passed we were interrupted by an order to report to the Admiral commanding the European Station at Ville Franche, and from there we were despatched posthaste to Constantinople on special duty.

At that time most countries maintained a small gunboat as *stationnaire* at Constantinople, in view of political and social conditions, at the disposal of their diplomatic officer there; and, while the United States had not followed the custom, it had just been represented by the American Minister, Mr. Maynard, that a vessel of some kind was needed, as war with Russia seemed probable. The size of our squadron had become so reduced that the Rear Admiral commanding had hoisted his flag on a hotel in Nice, and joking reference was not infrequently made to *l'amiral Suisse.* As a last resort the *Gettysburg* had to be turned to, and orders were received from Washington transferring her from special duty to the European Station. On March 11, we sailed for the Golden Horn.

Upon our arrival we found English, French, Russian, German, Austrian, Dutch, Italian and Greek *stationnaires* there, lying with one anchor out ahead and the stern moored to the quay. We were busy for some days in making and returning official and

informal visits. There was a good deal in the way of functions both afloat and ashore, some of them jolly enough and some not so jolly. Whenever the Sultan would go afloat it would be the signal for manning yards, which for us meant manning our one squaresail yard and the paddleboxes. The Sultan's *caique* was one of the most beautiful things I have ever seen—long, with graceful lines, and tapered bow and stern, white, with a little coloring; and the most perfect finish. It was propelled with remarkable speed by a number of oarsmen who for each stroke would rise and make an obeisance toward the stern and then sink back upon the thwarts, thus adding their weight to the stroke. The steersman, a magnificent creature at the extreme stern, guided it to and alongside the quay with consummate skill. The Sultan would sometimes pass on his way to the mosque.

Trips through the bazaars had a certain fascination; and we had several very pleasant rides in the suburbs, and even picnics across the Bosphorus in Asia Minor, for which we were indebted to the friendly initiative of the Minister and Mrs. and Miss Maynard, whose cordial and agreeable hospitality made us sorry to think of leaving. The roads were good and the horses spirited; indeed, the spirits of my horse upon one occasion were tantamount to viciousness, and it was suggested that I should change to another, which suggestion I was inclined to regard favorably until a suspicion of a curl appeared on the lip of Miss d'E., whereupon, for the honor of the *Gettysburg*, I decided to see it through.

But the great event of our stay was a boat race between our service cutter and the racing cutter of H. M. S. *Cockatrice*. The latter had won a number

of victories at Malta and had beaten in every contest at Constantinople, and, when they came alongside, the crew had the air of recognized champions, with light blue skullcaps, a blue pennant in the bow, etc. But we had a remarkable crew, and in a four-mile race, two to the turning boat and two back, our boat came in three minutes and thirty seconds ahead, or about a twelfth of the whole time. The tale was carried throughout the Mediterranean and gave us great fame which afterwards we were severely put-to to support.

The Navy Department had authorized the Admiral to employ the *Gettysburg* for one month to meet an emergency, during which time arrangements could be made for other vessels to take the duty. In consummation of this arrangement, on April 15 an order reached us from the Admiral detaching us from the squadron and ordering us to proceed at our own discretion on the special duty to which the ship had originally been assigned. But as war was imminent, the Imperial Russian yacht *Heracle* having come to take the Embassy away, Captain Gorringe decided that we should stay in the vicinity until the arrival of some ship to relieve us. This did not occur for a week. In the interval we did not remain at Constantinople, however, but ran across the Sea of Marmora and down the Dardanelles as far as Chanak, first waving an enthusiastic good-by to the officers assembled on the bridge of the *Heracle.* I daresay they murmured, as we did, our *mot d'amitié* "Roosky Americansky."

The visit to Chanak was made with a view to giving the encouragement of our presence to the consuls and their families who constituted almost solely the population of that little town. This led to our hav-

ing a treat that is granted to few naval officers—nothing more nor less than a ramble through ancient Troy as well as a peep into Novum Ilium. Determined to make the best of everything, the Captain had the American Consul, Mr. Calvert, and the English Consul, with the ladies of their families, all come to luncheon, and arranged that the former and ladies should come on board at seven the next morning and go in the vessel to the mouth of the Dardanelles, where the ship would anchor. We would then ride over to the plains of Troy. This plan was carried out, and by half-past nine most of the officers, including myself, were mounted on the sorriest-looking beasts with the most extraordinary saddle contrivances I ever saw. It was a most motley-looking cavalcade of fifteen, including two Arabic-looking attendants.

The site of ancient Troy, revealed by the then recent excavations of Dr. Schliemann, is about five miles from the Dardanelles, but our horses were fearfully and wonderfully made and as girths, stirrup straps and bridles were constantly snapping, we were over an hour and a half in reaching it. But then the sight repayed all annoyances. There was the venerable Priam's palace (so pronounced by Dr. Schliemann); I did not remember very much of the Aeneid, but I fancied I selected the spot where Priam stood when the enemy entered, and I picked up a marble fragment as a souvenir. I also brought away a relic of the Temple of Minerva. We wandered about among the ruins for a while, including Novum Ilium, which looked decidedly more solid and less antique, although there is not such a great difference in the dates of the two. When the enthusiasm of the keenest was exhausted we were in-

vited to remount and proceed about four miles farther to the Calverts' farm for luncheon. The weather was perfect, and perhaps the fun we had over the horses added zest to the novelty of lunching on an English farm (for the Calverts were English) on the plains of Troy. Mrs. Calvert, who happened to be staying at the farm, was hardly prepared for a visit from thirteen hungry horsemen; but she rose to the occasion in a way that left nothing to be desired, and we found that eating roast mutton with a spoon did not detract from its flavor at all. And such milk! A cigar after the meal and a chat with our kind hostess detained us until four o'clock, when we returned to the Dardanelles, and the ship and Chanak.

The news was very conflicting as to the diplomatic situation. Two telegrams on the same day stated respectively that "everything has been amicably settled," and "hostilities have been commenced." But on April 24 war was declared by Russia. The *Vandalia* arrived, however, and we departed, carrying away treasured recollections. After Troy and sailing through the broad Hellespont and by the classic shores of Greece, we were moved to read (and spout) Byron to the extent that, after taking our departure from Cape Matapan at daybreak, I chronicled it in a letter home in the quoted lines:

"The morning watch was come; the vessel lay
Her course, and gently made her liquid way."

To which, in a reprehensible spirit of satire superinduced by having been on deck all night piloting through the archipelago, I added:

"And while the ship her new course lay,
I slept, and gently snored away."

And so we returned to the duty for which we had been sent abroad. The west coast of Italy and the African shore were to be the first theater of our operations, and the minute examinations we made took us into little nooks and corners unknown to the general mariner; many of them seemed very quaint to us of the New World. As an instance, about midway between Genoa and Spezia, we discovered a little gem whose successful rival in point of lovely coziness and handsome magnificence combined I have never seen. Just within the high, dark promontory of Porto Fino is a minute bay, with a village on its encircling shore; we went there from Genoa and peeped in but had to back out as there was not room to turn inside. We anchored at the entrance, however, and remained for a couple of days as it was so quiet we could put our notes in final form uninterrupted. We landed for a good look inside, and a more beautiful little spot I have never seen. Great cliffs rise vertically from the water in many places, varied here and there by a little strip of gravelly beach fronting a deep, dark ravine, away in the depths of which we could hear a foaming torrent; and we would wonder if that torrent had become subdued and changed into the gentle stream that ran so noiselessly at our feet. Late one afternoon, the Captain and I pulled ourselves a little distance up the coast, in a little pullaway boat that we had, and landed for a stroll. We walked and walked and walked, and the fine, macadamized road, winding along through the cliffs and around them and under them did not detract in the least from the beauty of

the scene; it was an endless variety of prettinesses —immense boulders of bare rock, olive groves both large and small, noisy little waterfalls, even an old palm tree—its very being testifying to the mildness of the winters. A wealthy English banker had discovered the place some years before and, for a modest sum, bought a ruined castle perched on the top of a cliff, and converted it into a singularly picturesque summer residence.

The islands of Corsica and Sardinia also abounded in rarely attractive bits of coast; many reams could be written about them, as also of Sicily. But there is much less that is new in the world to-day than there was then, and much of what appealed so strongly to us then would be of slight interest now. In some places the clear limpidity of the water was very striking. One evening we anchored in Asinara Bay, at the northwest corner of the Island of Sardinia, in ten fathoms of water, and, while preparing to get under way early the next morning, we could see distinctly the studs in the links of the chain cable lying on the white sand bottom. It was so fascinating that I prevailed upon the Captain to postpone getting under way for half an hour while we donned bathing duds and dove off, pretending to try to reach the cable.

While in that vicinity we did not fail to anchor at the island of Caprera, the home of the famous General Garibaldi, and a number of us accompanied the Captain on a visit to pay our respects to him. The island, like its neighbors, is very barren and desolate, and we found the old warrior's home much the same; he, himself, though very white, still had the eye of a young man and the full force of his peculiar

intellect. The attendants about him evidently were old soldiers.

No one fond of languages could fail to be fascinated by the soft Italian speech, so easy of acquisition, too, up to a certain point. Although we visited Civita Vecchia I did not get to Rome and could only acquire the *Lingua toscana in bocca romana* at second hand; but the attraction was none the less in reading.

Some of the real wonders of that peculiar Mediterranean Sea were revealed by our deep-sea sounding machine which enabled us to discover unsuspected depths in the Tyrrhenian Sea and other restricted waters. That whole region is a marvelous congregation of deeps and heights, something which one instinctively associates with Vesuvius, Stromboli and Etna; perhaps our discoveries appealed to us all the more vividly because they were actual discoveries.

An interesting diversion from the somewhat monotonous routine of running along shore and writing descriptions of it occurred when Captain Gorringe, a couple of others and I made an excursion inland from the African coast to visit a region, lying below the level of the Mediterranean, which the French Government was thinking of inundating by means of a canal between the Gulf of Gabes and Shepka el Fejii. The two main objects of the proposed enterprise were a probable amelioration of the climate of Tunisia by the large evaporating surface and resulting, increased rainfall, and a more rapid means of transportation of merchandise and troops. The probability of the former effect was based upon what had actually occurred on the Isthmus of Suez when the canal was dug and the depressions along the route flooded. The part of the coast nearest to

the depressed area is in the Gulf of Gabes, some distance eastward of Tunis, and it was while we were coasting along there that the jaunt was proposed by the French Consul at Gabes who offered to provide horses and an escort. It is needless to say that the offer was accepted, and that the excursion was replete with interest. The horses, Arabian, were excellent; but our experienced escort would not let us wear them out in our first enthusiasm. So we took two days and nights for it. In the daytime it was very hot, well up in the nineties, although it was in the month of January, but at night it grew quite cold. In the middle of the first night I was awakened by an intense pain in the toes of one foot, and I found that that foot had strayed out from the blanket and was in contact with the desert sand which felt like crushed ice. The next morning the self-registering thermometer indicated twenty-nine degrees.

I had the mortification of finding myself, like other stupid voyagers on the desert, victimized by a mirage. Although I had often read and heard of the remarkable illusion, I was not deterred from pointing ahead once and saying that it might be nice to pitch camp by that pretty, blue lake. There was no lake; but I would not believe until we had ridden miles toward it and it had gradually become *not there.*

For our edification the Arab escort went through some of their fighting tactics, galloping about in pairs, each with an arm around the other, and handling their guns very skillfully. Individually they were fine, able-bodied men, but somewhat parched in appearance, which was probably largely due to their life of exposure to a hot sun with a very dry air. Not improbably their diet may have had something

to do with it, as they seemed fond of peppery things. At a meal that was prepared for us in an oasis during the ride out, there was a dish called *kouss kouss* of which they seemed particularly fond, but which, when I tasted it lightly, set my lips and my face near my mouth aflame. I could not pretend to go on with it, and had frankly to wipe my eyes.

I think we all had an object lesson the first morning in the awkward plight of one of the party who had allowed himself to become a slave to coffee to such an extent that while we were bustling about making a fire, cooking an omelet, and packing the equipage, etc., preparatory to getting underway, he could only hold his head in his hands and moan, "Get me my coffee; I can't do anything until I've had my coffee." He told me afterwards that he had tried to cure himself, even with the help of the doctor, but it was impossible. It constituted a caution that has been ever present to me.

That little outing aroused considerable interest among us in the projects of inundation, though I felt convinced that it never would be carried out. From all that I could gather on the subject there would be no difficulty in the undertaking, and the climatic results would probably be satisfactory; but as there is no outlet but a constant inflow, the evaporation, estimated by Elisée Reclus at a meter every year throughout the Mediterranean, would precipitate the saline contents right there, and at such a rate that in the course of a generation the size of the inundation would be materially reduced, and in time the depression would be entirely filled with a solid mass of salt.

We had another marked instance of the effect of mirage in the vicinity of that coast. Standing south

from Malta, one day I had advised the Captain that we should probably sight the shore at about one o'clock. As noon approached, I took station with my sextant on a paddle-box with a clear view ahead for the noon observation of latitude, and, upon bringing the sun down to the horizon and looking through the horizon glass, what should I see but a fringe of date palms which grew more and more distinct! I was quite nonplussed, and was relieved and yet still more mystified by finding my estimated latitude confirmed by the observation. When reporting the latitude to the Captain, I confessed that I could hardly believe that the chart was twelve miles in error in latitude but could think of nothing else to suggest. Then, those palms began to fade away and had disappeared by half-past twelve; and at one o'clock they appeared above the horizon as expected.

In March and April, 1878, we had to make a long stay in Malta to have the boilers scaled. And that long stay was quite a feature of the cruise. The treaty of San Stefano, between Russia and Turkey, had just been signed, and the British fleet which had passed through the Dardanelles when Shobeleff occupied Tchatalja, in sight of Constantinople, was still in Besika Bay, while the Channel Squadron was at Malta in reserve. Ships of both fleets would come and go and there was a fine opportunity, therefore, to see the leading ironclads of that day. The *Temeraire* came in possessed of two features which impressed us greatly; she had the equipment, novel then, though commonplace to-day, of twin screws, and it seemed almost uncanny when, having stopped in the harbor, she commenced turning as if on a pivot. The other feature was the disappearing mounts of the guns; we would see the guns protruding over the

heavy barbette and being trained in one direction or another, and then they would sink out of sight for protection during the operation of loading. That was a mistaken development that did not survive in later ships.

There were also several of the early type of broadside frigates entirely encased in armor. Among them was the *Minotaur,* which had five masts; we heard that on one dark night she had been run into by a small brig beating to the eastward whose captain testified at the inquiry that he had luffed and personally counted three masts go by and then filled away all too soon. Some thirty years afterwards I ran across the *Minotaur's* Captain, Rawson, in Australia where, as an Admiral, he was Governor of the colony of New South Wales. I spoke of the incident and he remembered it very well, saying the account was quite true.

It was in Malta that the *Gettysburg's* crew had the tussle of their lives to live up to the fame acquired by so decidedly beating the *Cockatrice's* racing cutter. Ship after ship sent a boat to toss oars under our bows, and every challenge had to be accepted. Some of those ships had nine hundred men to draw from, while there were only ninety in our crew. But in spite of appearances our men had the best of them physically; those Englishmen were splendidly robust, burly men, but they did not have the wind and the muscular staying power of our lanky-looking oarsmen. Race after race we won, some between double-bank cutters and others between single-bank gigs. At the conclusion of one race, when the two contestants came to the gangway of the ship from which the start was made, and the usual question was put, "Have you anything to say?" our winning

coxswain replied, "Nothing, sir, except that we'd like to exchange boats and pull it right over again, provided we start in ten minutes." It was really incomprehensible, at least to me. We did not do any training in those days in the sense in which the term is usual now, that is, special diet, and exercises, etc. I had our boat's crew in charge, and when a race was likely would take them out in the morning watch for a pull before the day's routine began, and again in the "second dog;" but that was all. One wiseacre in the crew, however, said to me, "Look at them fellers; they feed 'em on cocoa; coffee's what does it."

The unbroken series of defeats had a natural tendency to create a little soreness among the Englishmen. And yet one morning, when I was coxswaining our boat in a vigorous sprint down the bay, passing close to several of the ships, the crew of one of them lined the rail to watch us and gave us a good, cordial handclapping as we sped by. That was very sportsmanlike, I thought.

The social pleasures in Malta, both afloat and ashore, were tendered us with most delightful cordiality. The Governor, Sir Charles van Straubenzee, kept apparently open house for us, and his Lady and Miss van Straubenzee seconded him most pleasantly. At the Admiralty, Vice Admiral Hornby, aided by his two charming daughters, also made time pass most delightfully; there was hardly an evening when we were entertained that there was not a violin and a piano going. There was also a very attractive opera, subsidized by the Admiralty as a step toward keeping the people cheerful. It was much the greatest treat of the kind I have ever had. Captain Gorringe made a ruling that, as I was hard at work all day and every day collating and giving final

touches to the Sailing Directions, the custom requiring the Navigator to be on board when the Executive Officer was out of the ship would be held in abeyance; so I was at Government House, or the Admiralty, or the opera nearly every night when we were not dining, or being dined by, some regiment or ship.

Those dinners to, or at, the various messes, were a serious matter. In the seventy-two days we were there we were dined by ten regimental or wardroom messes, and every dinner, of course, had to be returned. They set such a handsome pace with their large numbers and fine equipment that it was very hard upon the purses of our little mess to make an adequate return. In our Navy there was no governmental allowance for entertainment, and the situation was met financially only by the knowledge that upon leaving that hospitable port we would be for six or eight weeks in the inhospitable waters of Africa and free from all expense except the regular mess bill. By the end of our stay we were certainly stricken in pocket, though proud in demeanor.

The first dinner that we attended, at the mess of a Highland regiment, was an "eye opener;" the solids were all that could be wished for, and in regard to the liquids there was nothing but champagne, and that was served in magnums. There was a finger bowl at the hand of the president of the mess in which was deposited every cork drawn, and at the end of the dinner the corks were counted to determine if the thing had been properly carried on; the number per man present was—well, I promised not to tell; but they admitted that it had been properly carried on. After dinner they had a jolly, little pastime which they called Shanghai Rooster; one man

would take another one pickaback, and two couples, thus formed, would have a cock fight employing ramming tactics. The expertness with which they would maneuver and brace themselves against a collision was quite wonderful. We had to take part, of course, but I was glad that it was not guests *vs.* hosts as, with our lack of practice, the results would have been very different from those of our boat races. There were some heavy tumbles. The saying that "Englishmen take their pleasures sadly" certainly could not apply to that mess—nor to any of the others.

Fortunately for our return dinners, which were many, there was no import duty on champagne in Malta. Fortunately also we had quite a marvel of a steward, a veritable chef, and we had the satisfaction of hearing that, after our first dinner, the members of the mess that we would invite, limiting the number to six as we had to, would be keen to be among the ones detailed. We made some very good friends among them too. Some years later I was grieved to see that, among the officers of the Black Watch regiment cited as being killed at Tel el Kebir, were two of the little party of six that dined with us. But it's all in the day's work.

We got to be especially chummy with the *Sultan,* a formidable ironclad commanded by the Duke of Edinburgh who knew his ship well and was said to be a good seaman. We lay side by side for several weeks; and I used to wonder sometimes what would happen to us if we ever had a war with a naval power. The awakening came in time; but it was a coming event that had not then begun to cast its shadow before. The Duke, being a son-in-law of the Czar of Russia, occupied a somewhat unenviable posi-

tion during the tense days when England was forbidding the occupation of Constantinople by the Russian armies. It was said that he had found it expedient to have a little warning displayed in his cabin, "Please to remember that the Czar of Russia is my father-in-law." *Se non é vero é ben trovato.* I never saw it. We little thought then of how, in after years, Britain would rue her interference at that juncture.

The unquestioned sentiment on board our little ship, when the time came, on May 20, to put to sea and steer away for the Tripolitan shore, was that we had had a royal time in Malta. Two days later saw us sounding and sending boats in to reconnoiter the coast near Zougah, a short distance west of Tripoli. It was intensely hot for some days, with the wind right off the desert—which fortunately also made it very dry, there being at times 15 degrees difference between the wet and dry bulbs of the thermometer. Once I had to do some actual surveying, with a theodolite, and happened to strike an exceptionally hot day. A thermometer that I took on shore with me registered 130 degrees in the coolest shade to be found, while I was in the sun. I thought there must be something wrong with the instrument, but upon my return to the ship I found that away out there, over a mile from shore, the temperature in the shade had been 108 degrees, and our thermometer was correct.

Eastward we worked our way toward Egypt, stopping only one day at Tripoli and examining the coasts and adjacent waters for objects recognizable as landmarks and for rocks and dangers reported to exist. Some sponge fishermen in the Gulf of Sidra confirmed the reports of rocks, and we finally discovered some just awash, which we located carefully. Al-

though the principal one was but six inches out of water, the sea was so smooth that I was able to set out my artificial horizon right on the rock and take observations for geographical position. It was curious—that pinnacle rock not very far off the sandy shore.

The latitude of some of those stretches of barren coast was thought to be not very correctly established; and at one point, near what seemed to be an Arab camp, Captain Gorringe and I landed with a sextant and an artificial horizon to take a careful meridian observation of the sun as a check. But an elderly sheik came to us and said that he understood what we wanted and had no objection to it personally, but that he could not answer for his young men, and must ask us to go; which we did. But after nightfall, there being no moon, we pulled noiselessly ashore in a little boat with the instruments and a dark lantern and made some careful and satisfactory observations of stars within sound of the Arabs' camp; then we stole back to the ship without detection.

A little farther eastward we came to Marsa Sousah (ancient Appolonia) where we remained a couple of days. We had no time to explore ruins, and devoted ourselves entirely to prosaic hydrography; this was perhaps a pity, because an Arab showed us some jewels and coins that he had picked up among the ruins and which he offered to sell at a price which we considered monstrous. But whether it was monstrous or not, it was not more than a month since we had left Malta. Captain Gorringe seemed fascinated, however, and paid the man his price. A year later one coin of that collection was pronounced by the numismatist of the British Museum to be a

Ptolemaic of the fifth century B. C. It was put up at auction and competed for by three prominent national museums and finally brought about twenty times the price of that Arab's whole collection.

The poor old *Gettysburg* was rapidly approaching the end of her usefulness. Could we have foreseen what would happen five weeks after leaving Malta, we certainly would not have incurred the expense of those repairs; and incidentally we would have gone without those two months of "royal time" there. On the morning of June 25, immediately after getting under way, with a perfectly smooth sea and a gentle breeze, the crank shaft and engine frame carried away, completely disabling the motive power of the vessel. Why and how that shaft should have held together in bad weather, when the rolling of the ship would bring sudden, heavy stresses upon it and break in sea as smooth as a millpond, was an insolvable mystery.

We made all sail possible, the breeze being on the port quarter. In addition to the squaresail and other permanent sails we set everything that we could rig. Early in the cruise, in an accident, the spar forming the fore topmast and topgallantmast had been carried away and refashioned into a stump topmast. That left us with a useless gaff topsail, which was now set from the topmasthead to the weather squaresail yardarm; then a spare trysail was set as a port stun' sail, a fore-storm staysail as a main staysail, and a spare jib between the smoke pipe and foremast. To leave nothing undone, we stepped the masts and hoisted the sails in the boats hanging at the weather davits, and the mainsail of another cutter was hung on the jackstaff. Under this "cloud of canvas" we made one to two knots an hour.

As we were two hundred and fifty miles from Alexandria, Egypt, that rate of speed was not promising, and, of course, the wind could shift at any time. It was then decided that, if nothing could be done with the engine within a day or two, I should take the whaleboat, with a picked crew, and proceed ahead, and preparations were made to equip the boat properly.

But the necessity did not arise. It was the port engine frame that was broken, disabling also the circulating pump. The engineers cleared away the port frame, and by the next day arranged to turn the starboard engine exhausting into the condenser, hoping to exhaust from it through the outboard delivery; but that valve pounded so heavily that the plan was given up. Then a wood exhaust pipe was rigged from a manhole in the top of the condenser up through the engine-room skylight, and the engine was started "high pressure." That worked satisfactorily, and, the paddles being removed from the port wheel, we moved along at three to four knots, and at noon of April 29 arrived at Alexandria, exciting no little curiosity with the steam exhausting in jets through the hurricane deck, and with men on the starboard paddle-box with capstern bars to pry the engine past the center in case of sticking.

With the facilities of a shore establishment, the securings of the engine frame were strengthened and the various fittings adjusted. A new foretopmast and topgallantmast was also obtained, and a topgallant yard; and they were fitted and rigged and sails bent. On July 15 we hove up and put to sea under orders to proceed to Ville Franche, running the starboard engine as before against atmospheric pressure. The accomplishment of the voyage was

attended by vexatious, albeit humorous, incidents springing from the tendency of a single engine to stop on a center when moving at slow speed against perhaps a head wind. When that would happen, as it often did, the ship would have to be turned to bring the wind aft, and then, by making sail and gathering headway and using capstern bars through a hatch in the top of the paddle-box to pry the wheel over, the engine was started and the ship carefully brought back on the course. When the wind was favorable, of course, all sail was made.

The voyage of one thousand three hundred and eighty miles was accomplished in twelve days; and in time the ship was ordered to Toulon to go once more into the hands of the Navy Yard engineers. The broken parts of the shaft were taken out and securely connected, and the port engine frame repaired, and in nineteen days we returned to Ville Franche for further orders, that being the headquarters of the European Station.

Advantage of the inactivity was taken by several officers, including myself, to obtain leaves of absence to spend a week in Paris and visit the Exposition. It was a very grand sight, and interesting, though in so short a time one could do little more than take glimpses. Changes in names of streets were, of course, noticeable as a result of the change in the form of government in 1871, such as the Avenue Bois de Boulogne, formerly the Avenue de l' Impératrice; but Parisians seemed to be much the same as ever, with little surface evidence of the trials that they had been through—except the destruction of public monuments such as the Tuileries palace. The mere holding of that successful exposition only seven years after the events of 1870 and 1871 is a brilliant

testimonial to the patriotism and capacity of that great people; and Germany, except for a few German paintings, was the only great nation not represented there.

On September 17, 1878, orders were received to proceed to the United States; the homeward-bound pennant was instantly broken at the masthead, all hands were called "up anchor for home," and on September 21 we arrived at Gibraltar. But we had not passed beyond the realm of surprises; while coaling for the homeward voyage across the Atlantic, an order reached us by cable from Washington to return eastward and continue our special duty. That was a veritable bombshell, the reason for which was not known until later. In the Report of the Secretary of the Navy for that year occurs the passage, regarding the *Gettysburg*: "It is deemed impracticable, in consequence of her condition, to attempt a voyage across the Atlantic with her at this time, and it may ultimately become necessary to dispose of her in Europe. . . ." Consequently it seemed a wise move to get as much more of her special work done as was possible without fitting out another vessel for it. It was realized on board that there would not be much more done by her; and I was detached and ordered home in charge of a party of court-martial prisoners, and invalids and overtime men.

On the same day that the *Gettysburg* got under way and headed eastward for the Levant, a mail steamer carrying my party stood out to sea through the Strait of Gibraltar after receiving three farewell cheers from our former ship.

The *Gettysburg* reached the Levant and prosecuted her work for a while; but before long she had to give

up and proceed to Genoa, where she was condemned and sold at auction, realizing $11,000.

Going on duty in Washington, in the Hydrographic Office, I was married to Miss Maria Campbell Bache Wainwright, and we established our home there, where we had both been born and where our mothers had been intimate.

## CHAPTER VI

EXPEDITION TO BRING OBELISK FROM EGYPT TO NEW YORK

Plan of structure for removal—Edinburgh and Glasgow—Cairo—Tewfik Pasha, Khedive—Factitious sentiment against removal of Obelisk—Burton and Rohlfs—Work of removal begins—Pedestal, foundation and bronze crabs—Lowering the Obelisk—Purchase and outfitting of steamer *Dessoug*—Obelisk and ship in floating dock—Masonic emblems—Embarking the pedestal—Homeward voyage—Crank shaft broken—Reach New York—Error in account of erection of Obelisk in Rome.

During the *Gettysburg's* short stay in Alexandria while preparing for the voyage to Nice, Captain Gorringe and I occasionally visited the obelisk which stood there, and commented upon its unattractive surroundings and its utter loneliness. But I did not know, though I might have suspected, that in his restless mind had arisen vaguely the question as to how he would do it if it came to him to take it to America. Just a year afterward, he suddenly appeared in Washington and took me out for a private talk, the subject of which was that such a matter was under consideration and that he intended to undertake the work of its removal, and he asked me if I would go with him. That was a call that I could not resist, so it was arranged that we should obtain the necessary leaves of absence and embark on the enterprise as quickly as possible.

As the termination and result of sundry negotia-

tions, His Highness Ismaïl, the Khedive of Egypt, had presented the obelisk to the United States for erection in the city of New York; and Mr. W. H. Vanderbilt had announced his willingness to defray the expense of removal and reërection. Mr. Vanderbilt's public-spirited offer was, naturally, simply to pay a certain stipulated sum upon the completion of the work; Gorringe accepted the proposition and the conditions named without shrinking from the almost insurmountable difficulty of securing the money to carry on the work. That was indeed a difficulty, and there is no telling how it could have been overcome but for the liberal-mindedness of Mr. Lewis F. Whitin, of New York, who knew Gorringe and tendered him a sum sufficient to commence and push operations. Such an offer, without security in the event of the monolith being broken or seriously marred during the operations, was eloquent in its expression of confidence and generous friendship.

The plans for the removal and shipment overseas were devised entirely by Gorringe, and necessarily were different from any previously employed. No obelisk had ever been removed from Egypt except in a special vessel or caisson built to float it; the voyages had been almost wholly within reach of safe harbors and, therefore, there seemed no objection to their being made in tow. The present problem was different, involving a voyage across the Atlantic, and the plan was to employ a self-propelled, seagoing vessel, and work out some way of getting the stone on board. As the obelisk was standing, a turning structure was advisable which could be used in Egypt for turning and lowering it and in New York for raising and swinging it vertical; this was met by a pair of steel towers, resting on masonry, and carrying at

the top a pair of pivots, like the trunnions of a gun, which would clasp the obelisk at about the center of gravity. Tie-rods, capable of being shortened by screws and turnbuckles, connected the trunnions with beams under the bottom of the obelisk, which rested fortunately on bronze supports leaving a space between its heel and the pedestal.

A contract was entered into for the construction of the towers and a transporting cradle, and Gorringe and I sailed for England in August. Efforts had been made without success to charter an American vessel for the purpose; and now we tried to charter an English one, but without avail, the rates for a charter for such purpose being equivalent to a purchase. The search for a vessel took us to Glasgow, with an opportunity to visit Edinburgh and the Trossachs, and to cross Loch Katrine, past Ellen's Isle of Scott's *Lady of the Lake,* the grandeur of which served to check undue adoration of the works of mere man. But those Clyde shipyards were very inspiring in their way.

Failing to charter a vessel, we traveled through France and Italy to Venice and on by steamer to Alexandria. Upon arrival we lost no time in establishing our status before the officials of the government. This necessitated a visit to Cairo. The Khedive was Tewfik Pasha who had just succeeded his father Ismaïl in June. He was most courteous and affable, and we gathered the impression that, while not so aggressive as was his father in resisting the encroachments of foreign advisers, he was possessed of a genuine desire to govern the country for its own benefit. He realized how necessary British assistance and support were to the welfare of Egypt though undoubtedly he was looking forward to break-

ing the shackles which accompanied that assistance.

Personally prominent in the Khedive's environment was Colonel Ahmed Arabi, who became far-famed a couple of years later as Arabi Pasha, Minister of War, and leader of the attempted revolution which Lord Cromer afterwards admitted to be "in its essence a genuine revolt against misgovernment." To us at the time he seemed a simple though uncompromising soldier, who spoke no European language and could well be recognized as descended from a fellah family and entitled to style himself *al Misri,* "the Egyptian." It was at Tel el Kebir, his Waterloo, later, that a number of British officers fell whom we had known in Malta while in the *Gettysburg.*

We could not afford to delay a moment in taking steps to obtain official and physical possession of the obelisk, for there was a growing antagonism among the foreigners to its being taken away, and its being officially declared American property lent legal support to the physical resistance that we were prepared to give to any demonstration or forcible intervention which for a while seemed not unlikely. It is only fair to say that the government of the Khedive seemed to be perfectly loyal in its attitude and disposed to afford all needed protection when formally appealed to. It was only certain foreign department heads that placed, or failed to remove, obstacles.

It was not unnatural that sentiment against the proposed removal should be aroused among persons who, although foreigners (to Egypt), were domiciled and had all their interests there. In our own country even there was occasional expression of sentiment against "despoiling the Egyptians." But it was a mistaken sentiment. The obelisk was standing in the outskirts of the town, near the seashore,

and the constant washing of the surf, which was only eighty feet away, had begun to affect the foundation, and for some time it had been inclining more and more toward the sea; in a few years it must have fallen and almost certainly would have been broken in the fall. Other reasons, less practical perhaps, were that, although it was near the Ramleh railway station and a familiar object to the many foreign residents who lived in Ramleh and passed it several times every day, going and coming, the interest shown was not sufficient to cause steps to be taken to prevent its defacement, and there were men who made a business of breaking small pieces from the base for sale to relic hunters. Also, there was a project on foot among some of the foreign residents to erect an apartment house around the obelisk which was to adorn the courtyard. True sentiment against removal existed in the minds of very few; it was mostly factitious and the steps we took to protect our property were an efficient deterrent to manifestants.

It is pleasant to remember that such matters did not interfere with our making some pleasant acquaintances, Greek and Italian as well as English, with whom we passed an occasional evening very agreeably. Our days, of course, were full from sunrise until dark. Some notable persons also drifted in and out, to meet whom was a privilege. Prominent among these was the noted explorer and orientalist, Burton (Sir Richard Francis), whose pilgrimage to Mecca sixteen years before had brought him fame. Others of his journeys had perhaps been more dangerous, riding across deserts without food or water, and often in deadly peril at the hands of hostile tribesmen, although an adept at impersonating

Mohammedans. Showing the scar, he described vividly to me how, in a skirmish with the Somalis, he had had a javelin thrust through his jaw and had finished a personal encounter with it still hanging there. At the time we met him he was British Consul at Trieste; he related to me in an amusing way the requirement that consuls should be present in the consulates at some time in every quarter of a calendar year and that he, wishing to travel in Africa, and having a reliable vice-consul, would leave his post on the second or third day of a quarter and return just before the expiration of the next quarter. Then his report would contain the perfectly truthful statement that, with the exception of a few weeks passed in travel, he had been present in the consulate during both quarters. His manner was blunt to brusqueness but not unpleasant to any one whom he had no reason to dislike.

Quite different in personality from Burton was the well-known German explorer, Rohlfs (Friedrich Gerhard), who had just returned from an expedition which was frustrated by attacks of Arabs. Commissioned by the German African Society, in 1878, to penetrate to Wadai, he and Dr. Stecker succeeded in reaching the oasis of Kufra, one of the chief centers of the Senussites, but were obliged to retreat, making their way to the coast at Benghazi. While sufficiently practiced in the manners and customs of Mussulmans to travel among them as one of them, he was in address and speech quite the antithesis of his English *confrère,* Burton, having a noticeable suavity of manner that colored his every action. While we were chatting one evening in a hotel parlor, a flying bug of some kind alighted on a curtain, and Herr Rohlphs, apparently recognizing a rare speci-

men, seized it and pinned it to the lapel of his coat with a gentle courtesy that seemed to suggest that he was apologizing to the poor thing.

Upon our return from Cairo, we set to work in earnest. Cheap labor was not scarce in Alexandria and we soon had a number of men and boys digging an excavation large enough to build the caisson in which we planned to transport the obelisk round by sea to the port of embarkation, a distance of about seven miles. The vicinity had been filled in to such a level that nothing showed below the base of the obelisk when we took hold, and it was a subject of interesting speculation as to what would be revealed. There is no doubt that there had also been a general subsidence of the entire shore during the nineteen centuries that the obelisk had been standing there, as we found that the bottom of the three steps that were uncovered, and above which stood the pedestal, was at nearly mean sea level; it certainly would not have been placed so low by Cæsar's engineers.

The excavation revealed first the handsome pedestal, a huge block of the same syenitic granite as the obelisk itself, which in turn rested upon a base with three steps of hard limestone. The heel of the obelisk did not touch the pedestal but was supported at the corners; there had been a bronze block under each corner originally, but at some unknown time two of them had been removed from opposite corners and blocks of stone substituted. The two remaining bronze blocks were found to be mutilated badly; they had been cast in the form of crabs, but when we uncovered them all the legs but one and all the claws but a part of one had been broken off and removed, probably for the value of the metal. Most fortunately that one remaining claw bore two inscriptions,

on one side in Greek, on the other side in Latin, which fix the date of reërection in Alexandria as "in the eighth year of Augustus Cæsar."

The chipping and wearing away of the corners at the base of the obelisk and the substitution of stones for bronze blocks under two of the corners, coupled with the inclination from the vertical, caused us serious concern, and it was a moment of great relief when, the towers being erected, the obelisk was firmly grasped at about the center of gravity and the weight taken by the tie-rods.

The next step was to swing it to a horizontal position; this was successfully accomplished, and timber stacks were built under each end upon which the weight was afterwards taken. It was a critical moment to which we had been looking forward with some anxiety, especially in the fear of distraction and disturbance by the crowd of careless sightseers who were not apt to pay much attention to our Arab gatekeepers. But we were greatly assisted and cheered by the action of Rear Admiral Aslambekoff of the Russian Navy, who was in port in his flagship, the *Minin*. Understanding the situation, he not only had a large staff of officers present in response to our invitation but also landed a large force of trained seamen, unarmed of course, but competent to form an effective cordon around the grounds, especially reinforcing the gatekeepers.

With the obelisk resting on the timber stacks, the towers were quickly dismantled, the pedestal moved to one side into an enlargement of the excavation, the foundation stones removed, and work begun on the wooden caisson into which the obelisk was to be lowered. The lowering was done by means of specially designed 60-ton hydraulic pumps; they would

take the weight, releasing the timber stacks sufficiently to permit pulling out one tier of timber; then the pistons would be allowed to descend slowly until the stone rested again on the stack, and so on. Finally it was gotten down, and the caisson was built inclosing it; this was then launched and towed around to the port.

During these operations negotiations had been in progress and had finally culminated in the purchase of the steamer *Dessoug* from the Egyptian government. This was an iron vessel built in England in 1864, and the fullness of her form and particularly of the bow lines soon attracted Gorringe's attention as she lay dismantled in the Navy Yard. Measurements were made which satisfied us that the forward compartment, between the collision and coal-bunker bulkheads, was long enough and had height enough under the lower deck beams to admit the obelisk. There was a floating dock there which would take that vessel and at the same time, ahead of it, the obelisk in its caisson. The plan was quickly formed of getting the two in proper relative position, cutting open the bow of the vessel, demolishing the caisson, rolling the obelisk in, slewing it fore and aft, and riveting up the bow again. This general plan being decided upon, it remained to effect the purchase, which was finally accomplished. We sent to England and obtained two officers and three quartermasters; but the crew had to be gotten through the good offices of the American Consul in Trieste. Strangely enough they were all Italians, and a very good lot. The water front of Alexandria could not furnish a desirable ship's company.

We also had to send to England for a load of coal, which arrived in due time. We had an Arab fac-

totum whom I knew only by the name of Mohammed, a splendid specimen of manhood and a splendid man. I told him to get the necessary lighters and men and get that coal out of the collier and into the *Dessoug,* which he did. I said to him, jokingly, afterwards, "Now, tell me, Mohammed, how much of that coal have you got in your pocket?" But he shook his head pleasantly and replied, "Ah, no, Captain; s'pose I put fifteen ton in pocket; one up there; you call him God; I call him Allah; all same, He know." Pretty liberal-minded, I thought.

Embarking the obelisk was attended by great delays from one cause or another over which we had no control, and by great technical difficulties which were overcome. The actual transference from the caisson to the interior of the ship was done by a system first devised, so far as known, by Count Carburis who moved the pedestal of the statue of Peter the Great, weighing about six hundred tons, from the forest of Karelia to St. Petersburg. The essential feature of that system was the substitution of cannon balls for ordinary wheels or rollers, and metal grooves for ordinary tracks; Gorringe had decided to adopt and apply that method to any problem of movement that might be presented. But, as can be readily understood, to move a mass of more than two hundred tons over successive compartments of a sectional floating dock brings distortions and stresses that must be reckoned with. We could but feel grateful, therefore, to the French engineer in charge of that dock for the courage and good faith that made him undertake it, exacting from us only a promise of instant obedience in anything we might be called upon to do. The operation was success-

fully completed, and the obelisk carefully wedged and shored in position ready for a sea voyage.

There remained the pedestal and foundation. Speculation had been rife as to what their removal would reveal; the obelisk was known as one of Cleopatra's needles, tradition having associated the obelisks with that famous and last Queen of Egypt, and, although it was now known that it was not erected until about eight years after her death, there were not a few prepared to see a sarcophagus, containing her remains, in the foundation. But, as the event proved, the objects yielded to view referred to interests and histories long antedating the Cæsars. The pieces forming the steps, and all but four of those inclosed by them, were of a hard, grayish limestone; of the four exceptions three were of syenitic granite from the same quarry as the obelisk and pedestal, and the other of a soft limestone as white as the best statuary marble. The size, shape and mode of treatment of those blocks could not fail to arrest attention, and especially to impress Gorringe who was a Mason. The striking similarity between their forms with their actual and relative positions and those of the emblems of Freemasonry led to the appointment of a committee of Freemasons, by the Grand Lodge of Egypt to examine them. After discussion and deliberation certain conclusions were announced of intense interest to members of that fraternity.

The discovery and recognition of those emblems had a bearing upon the practical question of removing everything connected with the obelisk. When the pedestal was unearthed, and we remembered that not one large Egyptian obelisk out of Egypt stood upon its own original pedestal, we felt that it would be a crime not to take this one away in its entirety.

That would entail additional present expense which we were not in a position to incur, for the agreement with Mr. Vanderbilt concerned only the obelisk itself. But I felt quite confident that Mr. Vanderbilt would assume the additional cost in so important a matter, and, even if he would not, that the people of New York would come forward; Gorringe felt so, too. It was then decided to take the pedestal and all the foundation stones, if we could arrange to meet immediate expenses, and erect the pile in New York exactly as it had stood in Alexandria. The discovery of the Masonic emblems could only confirm us in the decision; and I may as well say here that our confidence in Mr. Vanderbilt's public-spirited munificence was fully borne out. We were also able to make arrangements to tide over present difficulties, thanks again largely to Mr. Whitin.

The handling of the pedestal presented a problem. It could be gotten on board only by means of a derrick; its weight was about forty-four tons and there was no derrick in Alexandria capable of lifting so much. But there was a crane on the Navy Yard quay that could lift thirty tons, and there was a floating steam derrick that could be counted on for twenty-five tons; the two acting together, therefore, could lift the pedestal if the duty put on the shore crane could be surely kept below thirty tons. To effect a proper distribution of the weight, computations were made to determine the position of the water line of the floating derrick when exerting a lifting power of twenty-two tons on the hoisting chain, and a mark was placed at that line of flotation; by keeping that mark under water during the operation, the shore crane would not be subjected to excessive or dangerous strain. A large lighter was

hauled up on the ways from which the obelisk had been launched, and the pedestal, together with the steps and foundation stones, was placed on it by means of cannon balls and channel bars, and brought to the Navy Yard under the crane. The two lifting machines were then hooked on to the pedestal, using a shot of the ship's chain cable for slings, and the weight taken; the lighter was then hauled away, the pedestal lifted well up, and the *Dessoug* warped in under it; then it was quickly placed and secured.

Among the foundation stones of the pedestal a number of coins were found, most of them very much defaced and corroded; but some were in good enough condition to be recognized as coins of Cleopatra's reign. Struck from different dies, four of them were thought to give a true representation of her classic profile, and, by an artist's genius, aided by photography, a beautiful portrait was evolved.

The obelisk being away forward and in the bottom of the ship, the pedestal was taken on board aft; and in order, as I hoped, to secure ease of motion in a seaway, it was stowed quite high, the upper edge of it actually showing above the deck; the foundation stones and machinery, aggregating perhaps one hundred and twenty-five tons, were carefully placed on a deck not far from the water line. In this way a moderate metacentric height was sought; and apparently the object was attained, as the ship's motion was all that could be desired.

We were a happy quartet upon putting to sea from Alexandria on June 12, 1880, Gorringe, myself, Mr. Price and Mr. Davis, foremen respectively of iron work and wood work, who had gone out on the expedition with us. There had been months of carking care, and one serious obstacle after another, all of

which of necessity weighed more heavily upon Gorringe, especially in view of the obligation that he was under to Mr. Within in New York; but he rose superior to them all. Fortunately our health had stood by us, and we had found the climate pleasant enough. It was only the days of the occasional Khamsin in the spring that were at all trying. That wind from the desert which blows for about fifty days in the year, thus giving the name (meaning fifty), is hot and dry, and generally lasts three days at a time, during which all residences where possible are kept tightly closed. It is surprising how the temperature inside is kept down in that way, at least during the first two days.

A stop was made at Gibraltar where we were the recipients of every courtesy from Lord Napier of Magdala, the Governor, and Lady Napier, and many others. Then we took our final departure for New York.

We were, however, not entirely out of the woods yet. On July 6, toward evening, being fifteen hundred miles from New York, with a smooth sea and a moderate, fair wind, we heard a commotion in the engine room and the engine came to an abrupt standstill; the after crank shaft had broken because of an old flaw. Fortunately no other damage was done. Fortunately also Gorringe had learned in Alexandria that there was a spare section of shaft belonging to the *Dessoug* and, with his customary determination, had insisted upon having it delivered on board. It belonged to the after engine. Then it was discovered that it had no bolt holes in the flange, and we had no tools to bore them. But we did have some bar steel, with which Mr. Price and the engineers of the ship fashioned some tools and bored the holes,

and then made bolts out of the tools, finally getting the engine in running order after drifting about for six days.

On the day following the accident the Italian barque *Nettuno* hove in sight, bound eastward, and I boarded her to ask them to take a telegram to the Navy Department to be sent from the first port they touched at, which they promised to do. They sent it from the Azores but it did not reach home until after we did. While chatting with the Captain, I said, in reply to a question, that we had plenty of provisions except bread (biscuit), and that if he had any to spare I would be glad to buy some. He said he had plenty, and ordered some bags brought up and put in my boat; but when I offered to settle for it he replied that, as he had plenty, he could not think of taking pay for bread from a ship in distress.

On July 19 we ran close in to Fire Island and made a prearranged signal which caused us to be reported to New York. Having no distinguishing signal or register number, we had had the name painted in big letters on the bows and stern, and approached New York with the American flag at the stern but Turkish flags at the mastheads. As a matter of fact, we did not even have any papers, the only document that we would have been able to produce, had the ship's papers been demanded, being a receipt for the purchase price from the Director General of Posts of Egypt.

My year's leave of absence being at an end, I did not ask to have it extended but returned to duty in the Hydrographic Office. My interest in Gorringe's work and my happiness in its successful termination continued unabated. The development of the mechanical arts at that time was very short of that

of to-day; and, although the difficulties on that score were less in New York than in Egypt, his road was more thorny than it would have been forty years later. The good people of New York owe more than perhaps they appreciate to his iron will and his common sense.

An account of our operations is embodied in the book, *Egyptian Obelisks,* published by Gorringe later and which contains a record of all Egyptian obelisks. I was glad to assist in that by preparing some of the chapters. By the time it came out, however, I had gone to sea, and had not the opportunity in time to bring to Gorringe's attention an error, as it seemed to me, in a passage quoted from the *Roman History* of Ammianus Marcelinus, descriptive of the method employed in the erection of the obelisk of the Lateran in Rome in about A.D. 357. The quoted translation, after describing the use of vast beams on end with a maze of long ropes of large size, etc., goes on, "and into them the great stone itself, covered over as it was with elements of writing, was bound, and gradually raised into the empty air, and long suspended, *many thousands of men turning it round and round like a millstone,* till it was at last placed in the middle of the square." The italics are mine. Identical renditions of the italicized part occur in the translations of Philemon Holland (1609) and of C. D. Yonge (1862). But manifestly that great long monolith could not be turned "round and round like a millstone" when suspended by a maze of ropes; and, even if it could, the operation would not raise it. So I looked it up in the vernacular. The original text of that passage reads: "quibus conligatus mons ipse effigiatus scriptilibus elementis, paulatimque in arduum per inane protentus, diu pensilis, *hominum*

*milibus multis, tamquam molendarias rotantibus metas,* cavea locatur in media."

The words "molendarias metas" being in the accusative plural, it seems reasonable to suppose that the meaning is more correctly conveyed by the phrase "turning [things] like millstones round and round" than by the accepted translation "turning [it] round and round like [a] millstone." If those two words had been written in the singular it would have been hard to escape the accepted translation, however evident the mechanical impossibility; but as they are in the plural, there seems to be no question as to the error of those translations.

The rendering that I propose would suggest the employment of capsterns, a suggestion having a special interest in connection with the crude representations of capsterns sculptured in bas-relief on the pedestal of the obelisk in Constantinople, commemmorating its erection under the Emperor Theodosius in about A.D. 399; the operations in Rome thus antedate by about forty-two years the earliest specific mention (that I know of) of the employment of the mechanical contrivance, known as the capstern, for multiplying power.

In a chapter which I prepared on the removal of the Luxor obelisk to Paris, I quoted a passage in an article in the *Journal des Débats,* of October 16, 1836, bearing as follows upon the failure of a steam engine that it had been intended to use in place of capsterns and tackles: "The steam engine is one of the greatest triumphs of mind over matter; it is nature made captive, working for man, and in man's stead. It is nature enslaved; and it is the only slave, the only serf of the future." Upon that quotation I commented: "The writer of those lines probably had as

little thought of the future of the electric current as we now have of—what?'' My father, upon reading that, asked me what I thought might possibly be the next development; but I could give no answer. Had he been able to ask the same question twenty years later the simple answer would have been ''the internal combustion engine.'' And now, being in possession of those two additional slaves since 1836, what will be man's next conquest? Chemical energy?

I was not again associated personally with Commander Gorringe; and a few years later death deprived me of that valued friend. His success with the obelisk caused a number of prominent gentlemen in New York to entrust him with the formation and management of a shipbuilding company. Those were lean days for outsiders who would seek to intrude upon the preserves of those who had preëmpted that ground. He found it necessary to resign his commission in the Navy in order to devote all his time to the company, and he invited me to obtain another leave of absence and join him as vice president; but, knowing that nothing would take me out of the service, I could only reply that it would not be fair for me to accept the offer for a year and then leave him in the lurch again. He built some very good ships; but in his inexperience he was unable successfully to combat all the influences and methods that assail a new enterprise. After going into the hands of a receiver, however, he was on the point of emerging from his difficulties and probably would have ''snatched victory from the jaws of defeat'' but for the accident which brought his life to a close. Attempting to board a train in motion, he slipped and fell, receiving a fatal injury. The Navy lost a capable officer and the country, a useful citizen.

## CHAPTER VII

SURVEYING—UNITED STATES FISH COMMISSION—DEEP-SEA EXPLORATION

Duty in Hydrographic office—U-Bow Section and a Long Buttock Line—Appearance and destruction of the tile fish—The pole flounder—Searching for reported dangers—West Indies and Gulf of Mexico—New red snapper banks—New Orleans Industrial Fair—Newport to Woods' Hole in a fog.

Navigation and surveying formed a connecting link, as it were, between what was getting to be called the Old Navy and what was soon to take shape as a New Navy. Seamanship, as an art of special character, was beginning to change its form with the passing of sail power and its supersession by the steam engine; while requiring in its new form no less ability and practiced judgment in the handling of large ships, it offered a diminished field for expertness in craft of only moderate size and speed and among officers doing simple watch duty not in company with other ships; and, therefore, it was threatened with a materially lessened regard. The third essential branch of the naval profession,—Ordnance,—together with its employment under the name of Gunnery, was not even commanding serious attention, although a beginning was being made in the production of rifled guns, largely through the conversion of large caliber smoothbores into rifles of much smaller bore; also, the Fleet Ordnance officer

of the North Atlantic Squadron, Lieutenant J. F. Meigs, had come to be known as the Fleet Gunnery Officer and was attracting attention by his insistence upon the importance of target firing. Conservative deliberation is commendable in the face of great changes; but many thought it was carried to the verge of paralysis in the process of advancing from cast-iron, through cast-iron and wrought iron, and wrought iron and steel, to finally all steel, with contemporaneous improvements in the mounts. It should be remembered, however, that we had an enormous amount of cast-iron ordnance on hand at the close of the Civil War; also, that the adoption of the rifle principle went naturally hand in hand with the advance in gun material, and everything waited upon the adoption of the rifle principle.

So, in the autumn of 1880, I looked forward with relish to duty in the Hydrographic Office, which anticipation was fully confirmed; and I passed two pleasant years there, interrupted only during six months, the winter of 1881-1882, by special duty in surveying Samaná Bay in the Dominican Republic. For that work the *Despatch,* Presidential yacht so-called, was detached from her usual sphere and fitted out as a surveying vessel, under the command of Commander William R. Bridgman who gladly accepted the duty, declaring that he would have considered it *infra dig* to command her in her normal service. He was a strict disciplinarian, a quality to which no one can rationally object; very uncompromising in his ideas regarding the performance of duty; reluctant to concede the superiority of steam over sail; a *bon vivant* and quite imbued with a desire to live and let live; quick to discern the qualities, good or bad, of those under his command, and not

over solicitous to conceal from them the impression made by his discernment. One could not help liking him, or, certainly, admiring him.

The little ship of 600 tons was well equipped temporarily for her work, and in her were crowded sixteen officers, so that four parties could be kept at work independent of the care of the ship. I was the Navigator; and among the other line officers several had had excellent experience in that kind of work in the Coast and Geodetic Survey, which was a fortunate thing and contributed greatly to the excellence of the results. The essential factor, however, was the high standard of precision required by Captain Bridgman. As an instance, I shall never forget taking in to him one day a working sheet, on a scale of five inches to a mile, to show him the hydrographic stations that we had established to angle on from the sounding boats. When I said something about those stations evidently being established with considerable accuracy, he assented somewhat reluctantly; but, after examining the sheet with a large magnifying glass, he pointed to one of them located by five "cuts" and commented that one of the cuts was only tangent to the pinpoint. It is no wonder that the chart-construction division of the Hydrographic Office declared it to be the best survey ever turned in.

The five months down there were passed in good hard work, the parties leaving the ship at half-past seven in the morning and getting back by perhaps half-past five, though not infrequently not until well after dark. Two of the four parties, of which I had one, did the shore work with theodolite, sextant and micrometer telescope. The ship tried to keep conveniently near to where those parties had to go; but

as the bay extends in to a depth of about sixteen miles the going and coming often amounted to a good many miles. We had steam launches for the hydrographic parties, while the triangulation parties had only pulling boats; but the crews of those boats became splendidly trained and would pull a racing stroke for miles. The return to the ship was generally under sail; in the afternoon the sea breeze rarely failed, and was generally so fresh as to require reefing, and care was taken to have the ship always to leeward. One day we had a rough time with my boat, which was a whaleboat equipped with the sliding-gunter rig; the sea breeze amounted to a young gale and we sped before it at a great rate, but when just about abreast the bow of the ship and preparing to brail up the foresail and bring by the wind, the boat broached-to and filled nearly up to the thwarts, and it took quick and earnest work to bale out that water and at the same time fetch the ship and not drift to leeward astern of her.

At another time we had a quite exciting race with a thunderstorm. My party had the south shore of the bay, and we were close-in on the roots of some tall mangroves and could see nothing except to the northward. Early in the afternoon we noticed that it was getting quite dark. The ship appeared in a peculiar light, being anchored about two miles off, and was flying a signal that looked like our boat's recall. It seemed so queer that I had the boat manned and we pulled away from the mangroves and found the whole southern board enveloped in an ink-black cloud which was advancing rapidly, while apparently torn with gusts and rent by flashes of lightning. It was not necessary to give the order "Give way"; those seamen saw we had a race with that storm and gave

way with a will. We had not gone a hundred yards, however, when the boat grounded on a bar. "Overboard everybody," and we "lighted her over," and started again. The same thing happened once again, after which we had a clear course, and the boat fairly flew. I could see that the boat falls were overhauled down on board the ship, and the crew were manning them; so I steered to bring the boat under the falls, and she was quickly hooked on but was barely clear of the water when that storm broke on us with rain and furious wind.

As an outing the work was thoroughly enjoyable—to those who enjoy that sort of thing, as I did. The only fly in the ointment, and a big fly it was, was that in the matter of eating we lived abominably. The member of the mess whom we had elected to the thankless office of caterer, as the mess treasurer was then called, had not appreciated the isolated character of that bay and had made little provision for the table. There was but one steamer arriving there every five weeks, originally from New York, and it was not until the second one had come and gone that he seemed to awaken to the possibility of utilizing her. The little village of Santa Barbara, near the mouth of the bay, had but scanty resources; once or twice we did get some tough fresh beef and some onions, and with regard to the latter I acquired a taste that I had never enjoyed before. There was no ice, of course, and no way of keeping fresh meat. As in the long passages in sailing ships, ice water was something that we remembered having read about; but we had no desire for it, as the monkeys cooled the water quite as much as we liked. For the picnic lunch taken in the boat, I always took a bottle of coffee, made the evening before and cooled during

the night; by keeping it wrapped in a wet cloth and hung in the breeze, it was very palatable and refreshing. My friend Gorringe, of his own accord, sent me a big box of all sorts of things—preserves, cheese, potted things, slab chocolate, honey, sardines, cakes, puddings, etc., which made me very popular for a while in the mess. Chocolate and hard-tack, washed down with cool coffee, made a very satisfying luncheon; and I would, whenever possible, get into some shady nook with the boat and crew and get the greatest enjoyment out of it.

It so happened one day that my mental activities became engaged in a subject quite foreign to our work. I had the use of a steam launch for a special purpose in the mouth of a little, fresh-water stream that made its way out through a maze of mangroves, and I observed a peculiar wave action imparted to the water by the bow of the launch as it advanced. This led to an interested consideration of the matter which I afterwards embodied in a paper before the U. S. Naval Institute, entitled "A U-Bow Section and a Long Buttock Line." The matter was, briefly, this: At a constantly moving point on either bank, if anything a little ahead of abreast the bow, a wave hollow was formed, followed by a marked corresponding crest, the disturbance apparently ending after the passage of the crest. The hollow must have been preceded by a broad, unnoticeable elevation of the surface, which, under a reasoning given in detail in the paper, I attributed to the pressure of the particles of water being pushed downward, as well as laterally, by the bow of the advancing boat. This suggested a wall-sided bow, in other words, a U-Bow Section, as the shape encountering least resistance to forward motion because of pushing the water

straight out laterally. The element to which I afterward learned to attach the greater importance was the incontrovertible fact that the lower and greater part of the void under the afterbody, constantly being made by the forward motion of the ship, is filled from underneath. In order to counteract to the utmost the retarding effect of diminished pressure under the run, it is necessary to give as free ingress as possible to the water flowing in as the vessel advances, and that manifestly can be most naturally accomplished by so shaping the bottom that the water can begin to rise well forward, that is, by giving her a long buttock line, and that cannot well be done except in association with a bow section of a more or less U-shape. The way a vessel "squats" when running in shoal water is proof enough of the lack of pressure and buoying power under the stern, caused by the water not flowing in freely.

The long buttock line, expressed in other terms, is an old story perhaps; but it is strange what failures there were to recognize the various bearings of the phenomenon of the water coming from underneath to fill in under the stern. Anything that checks that inflow must retard the vessel, and among such checks obviously is shallow water under the bottom; and yet, five or six years after the time of my Naval Institute paper, one of the greatest shipbuilding firms in the country wasted some time and a great deal of money in trying to make a vessel that they were building come up to her contract speed in shoal water. When, finally, a course was laid off in deep water, that vessel made her speed easily and with less horsepower than was developed on the unsuccessful trials. It is interesting to recall that within a few years after that, when courses were laid in the

deep water off Cape Ann for the speed trials of large vessels, objection was made to one course in that in one place there was a small area where the depth was only twenty-five fathoms.

In all that special work of the *Despatch,* uniforms had to be discarded. We quickly learned to dress entirely in blue flannel, however hot it might threaten to be. Besides, we often had to be in the water for a while with no thought of a change until the ship was reached, and flannel was the only stuff with which to meet that condition. One hot day, while we were working in water about knee deep, erecting a station at the outer end of a mud flat, a hailstorm came up, and it was so cold that we had to lie down in the water to keep warm. It was noticeable that among those who had the bracing, out-of-door work and exposure there was no sickness, while of those who had the ship duty, such as the Executive, engineers, the doctor and the paymaster, several suffered from fever.

Our work included establishing the latitude and longitude as accurately as was possible with the instruments we had. Upon arrival, we first ran meridian distances several times, with our special outfit of chronometers, between Santa Barbara and San Juan, Puerto Rico. At that time I first made acquaintance with what we now call Porto Rico cigars; the acquaintance soon grew into intimacy.

As the spring passed and summer approached, other duty was being contemplated for the *Despatch,* and in May we were called north. It was becoming quite hot, and the rainy season was approaching, too, so that regrets at quitting that picnicking work were tempered. Upon reaching Washington, we were all detached.

I returned to duty in the Hydrographic Office for the summer, being engaged in devising the plan and scope of Azimuth Tables and doing some of the computing. Before the computing was entirely completed, however, at the instance of Lieutenant Tanner who was to be in command, I was invited by the Commissioner of Fish and Fisheries to join the steamer *Albatross,* then being completed, as Executive Officer and Navigator, an offer which I gladly accepted, and I was so ordered in October, 1882. In any vessel in the regular Navy I would probably have had to worry through a period of watch duty in a commonplace, low-power steamer with a broadside battery of smoothbore guns on wooden Marsilly carriages, and with nothing to relieve the tedium of those wretched years, so I considered myself very fortunate.

The *Albatross* was a small vessel, not much over 1,000 tons, built of steel, with twin screws. She was the first government vessel to be equipped with an electric illuminating system. The environment, therefore, was of a distinctly progressive nature. The duties of the Executive were, of course, very light in so small a vessel; but as Navigator I had opportunity to gain more experience and skill in offshore navigation and inshore piloting than I would have had in many more years in a man of war, for we were always on the go, and on work requiring precision. I can never be too thankful for the practice of that cruise.

Before completing the three years and a little over, in that little ship, I realized that my greatest good fortune lay not so much in the mere experience gained in navigation as in the association with the Captain, Lieutenant Zera L. Tanner. He had en-

tered the Navy from the Volunteer service at the close of the Civil War. Being, unfortunately, more advanced in years than many about him, he reached the retiring age before attaining a rank higher than that of Commander. Being caught by the drastic reduction of the Navy in 1870, he long remained a Lieutenant, but was promoted to Lieutenant Commander shortly after our ship went in commission, and having been for some years on special duty with the Fish Commission vessels, naturally he was chosen for the command when the *Albatross* was built. He had commanded big ships in former times and was a consummate seaman; but apart from ability in the technic of the profession, he had a remarkable insight and balanced judgment regarding both men and things, coupled with an iron nerve and decisiveness. I have always felt that I owe more to his personality and unconscious example during those three years than to those of any other one man, and that is saying a great deal, for I have served with many, both senior and junior to me, from whom I have drawn inspiration as well as useful and practical suggestion. I also learned in that school how much more impressive and effective is unconscious example than studied example merely exemplifying precept.

Our little ship was designed and thoroughly equipped for the exploration of the deep sea, having the latest sounding and trawling and dredging machines with all their perfected accessories. The exploration consisted of more than ascertaining depths, temperatures, specific gravities, and obtaining cup specimens of the bottom; there was much that was of major interest to biologists and students of natural history, for with our trawl nets we would bring

up specimens of life on the bottom at depths of two thousand fathoms and at intermediate depths, and, with the dredges, large samples of the bottom with the fish found there. Soundings and temperatures were obtained from a depth of four thousand fathoms.

The operations were not solely in the interest of science. There was one subject of perhaps more immediate popular concern than the "specimens," and which was said to have had its due weight in determining the building of the ship. In 1879 a New England deep-sea fisherman, driven somewhat off the usual cod and hake fishing ground south of Nantucket, caught a lot of fish of entirely novel aspect which proved to be an exceptionally fine food fish. They would average perhaps ten to twenty pounds in weight, with flesh not unlike that of the cod and and with a pleasant flavor; it was also a more economical fish than the cod, a greater proportion of the weight being edible. One was sent to the National Museum where it was duly described as a new species and named *Lopholatilus chamaeleonticeps;* the common name given was tilefish. Its feeding ground becoming defined, it was caught in increasing numbers each year until the spring of 1882, when incoming ships reported having passed through immense fields of dead fish while crossing the northern edge of the Gulf Stream. Investigation proved them to be tilefish exclusively, and it was estimated that about one billion, five hundred million had been killed by some environment change, the nature of which seemed to defy conjecture.

Professor Baird, the eminent Commissioner of Fish and Fisheries, had recognized the importance of developing tilefish fisheries when those fish gave

promise of abundance. He was equally keen to discover if the family had been completely exterminated or if a few individuals had survived and would reproduce, and the *Albatross* was looked upon as a useful agent in determining that question and also in obtaining light upon the history of the fish. We, therefore, made careful surveys and studies of the waters that they had frequented, making temperature and specific gravity observations, and in different years we made many casts of the trawl net and of the dredge not only to bring up tilefish if possible, but to procure samples of the bottom where they would feed and to examine the contents of the stomachs of such other fish as were brought up, to determine if the food they contained was of a kind that tilefish would eat. At every haul made in those waters there was eager examination of the net in the hope of seeing the distinctive, large, round, yellow spots; but none were obtained. The other and smaller vessels of the Commission prosecuted the search at the same time with immense trawl lines carrying sometimes one thousand hooks. But that search also was unavailing.

The search was unavailing only in the failure immediately to obtain an individual fish. The researches, under the enlightened methods of the Commission, now known as the Bureau of Fisheries, solved the mystery of the sudden, apparent creation of the new fish, and determined the cause of its all but total extinction, and forestalled surprise at its reappearance in 1892. Its sudden appearance, in 1879, was simply its discovery; it had presumably existed there from time immemorial. In brief, the explanation is this: the structure of the tilefish permits and requires it to live under the pressure found

in deep water as a bottom fish; at the same time, examination of its habitat shows it to be a denizen of rather warm water; these two conditions coexist only on and near the edge of the continental shelf paralleling, in general, the southern coast of New England and the Jersey Coast. At depths of from sixty to one hundred and fifty fathoms is found the inner edge of the warm water of the Gulf Stream, inshore of which runs the cold Arctic countercurrent; and that belt is where the tilefish was found. Its destruction was quickly explained by Professor Verrill as due probably to a forcing outward of the cold water, as a result of a severe storm which occurred at that time, thus causing throughout that narrow zone a sudden lowering of the temperature which could not fail to be fatal to warm-water fish. A remarkable coincidence, seemingly providential in its character, is that the crustacea upon which the tilefish feed are limited to much the same physical conditions as the fish that feed upon them; there was noted a marked absence of them in the same localities and depths where, previous to the cataclysm, they had been found in vast numbers.

By 1898 the species was entirely reëstablished in its old habitat.

Another study considered by the Fish Commission, in which it was thought the *Albatross* could help, was that of the migrations of the shad on the Atlantic Coast. Each spring that dainty fish appears, first in Florida waters and successively in fresh-water rivers farther north, but, after accomplishing its task of depositing its spawn and incidentally giving joy to epicures during the summer, it disappears, and its farther movements are unknown. We could not discover anything of value. It does not come to the

southern coast in one huge school and wend its way northward; its appearances off Charleston, in the Chesapeake, the Delaware, and the Hudson, off Boston, and in the Bay of Fundy are so close as to indicate a progress faster than it can swim; evidently different schools approach each fresh-water outlet independently from the direction of the Gulf Stream. The suggestion that it returns to deep water, diving under the Gulf Stream, is met by the sole and somewhat negative argument that it has never been seen outside of that stream.

While working in that interesting zone southward of Martha's Vineyard and Nantucket, we occasionally made hauls, in the trawl nets, of one kind of fish that interested us peculiarly. That was the pole flounder (*glypto cephalus cyno glossus*), the peculiarities of which were that it had a delicious flavor, much like the sole, and was possessed of a mouth too small to take a hook large enough to land it. The latter feature was prohibitive of taking them for commercial purposes; but I understand that there has been an enterprise on foot to take them for the New York market. In that region also we often had a nice luncheon of scallops, brought up in the dredge.

The headquarters for the summer was at Wood's Hole; we would be out on the ground as long as the coal lasted, and then go in there for coal and to clean up and have a day or two of relaxation. So the summertime passed most pleasantly.

Our work, however, was not limited to the region of No Man's Land. It extended from Trinidad to St. Johns, Newfoundland, and all about the West Indies and the Gulf of Mexico, being north in summer and south in winter. Incidentally we expunged

from the charts a great number of "Reported Dangers," contributing to the ease of mind of many mariners. The depths that we found in those reported positions in the Atlantic were about three thousand fathoms (eighteen thousand feet) so often as to cause joking comment; in the Caribbean Sea they were less. We had an opportunity to see how seriously impressed ship captains could be with those pseudo shoals. At Curaçao we met an American tramp steamer whose captain came on board to ask if we had located a shoal reported in a certain latitude and longitude and which he had recently verified. He described how he had seen the gulls flying excitedly about and had gone close enough to see the surf clearly breaking over the reef but had finally sheered off and given the place a wide berth. I remembered our search well, as we had just finished it. Seeing the birds circling about, and then what seemed to be surf, we had approached cautiously with the hand lead going until right in the middle of the disturbance when we tried with the deep-sea sounder and reached bottom at something over two thousand fathoms. It was a tiderip which probably formed in that general vicinity regularly at certain stages of the tide, and the birds were attracted by the flotsam.

We did not encounter very much bad weather; but we had enough to show us that that little vessel was a remarkable sea boat. Her weights had been so skillfully distributed that lying-to in a heavy sea she would rise and fall with scarcely any roll. In one gale we tried a method of lying-to that had been practiced by one of the White Star liners, which consisted of hoisting the forestorm staysail and stopping the engines; she lay there with the wind and sea

a couple of points abaft the beam, as comfortable as an old shoe.

One winter we were loaned to the Navy Department and, for the Hydrographic Office, sounded out the Caribbean Sea, running lines of soundings across it. While sounding, which would sometimes take an hour, valuable data were also obtained about the currents; using the engines to keep the wire vertical, so as to have "an up-and-down cast," both the strength and the direction of the current could be noted. It was interesting; at the same time it was quite strenuous work for the Navigator. I would be in the chart house; the officer of the deck would call me when about to stop and take a sounding; while he was handling the ship for the sounding, I would take observations of two stars (if at night) at approximately right angles to each other, work out and plot the position, give the course and distance to the next sounding, about twelve miles off, lie down and be asleep in no time and up ready for the next one; and that would keep up as long as the coal lasted. We visited many small, out-of-the-way places, which have always a certain fascination. Among other ports we passed a week or so at Kingston, Jamaica, and I found several old friends there who had not forgotten the *Canandaigua.*

The Gulf of Mexico was a fruitful field for research in the way of fish. We got in touch with the fishermen of those waters, and soon learned the food value, as well as the pleasant flavor, of the pompanos, red snappers, and certain other species. We found also that those fishermen were becoming depressed over the outlook with regard to the snappers, as the banks where they were found were becoming "fished out"; some of the men were even talking of finding

other employment for their boats. By great good luck we were able to lend them an unexpected helping hand. While trawling and dredging in comparatively shallow water, twenty-five to thirty-five fathoms, not far off the west coast of Florida, we brought up some bottom fauna that the naturalists of the Commission quickly recognized as food of the snappers; so we threw over some lines, with two hooks on each, and instantly pulled them up with a fish on each hook. It did not take long to spread the news; and we found densely populated ground of a considerable extent that was a godsend to those fishermen.

While in the Gulf in the winter of 1884–1885, we went up the Mississippi to New Orleans at the time of the World's Industrial Fair, and, being moored at the end of a pier, were open to visitors all day, during a week, as a part of the Exposition. A large number of people flocked on board, and many seemed quite interested in our apparatus.

One thing in the Exposition that attracted much attention was the incandescent electric lighting of an auditorium where concerts were given. That mode of lighting was still in its infancy, and the point of switching on suddenly a large circuit had not been reached; with the circuit closed, the dynamo had to be sped up gradually, the lights beginning with a faint glow which quickly attained to the proper brilliancy amid the applause of the audience. Electric lighting for general use had not yet been introduced in the city, and that useful display was probably made partly as an exhibit.

The officers of the ship were interested especially in the tangible results that flowed from a large part of the operations. The dredgings often produced material that was important principally as a sub-

ject for detached scientific study and which would appeal more strongly to the naturalists than to the officers, but the latter would still have the responsibility of handling the ship and apparatus to secure the results.

For me, personally, the interest in the navigation and piloting was generally paramount; at times there would be situations that quite relieved any monotony that might exist in that branch of the work. One such occasion arose in August, 1884. We were at Newport, Rhode Island, and the Secretary of the Navy, Mr. William E. Chandler, came on board by invitation of the Commissioner to take passage in the ship to Wood's Hole. We proceeded to sea, taking our departure from Brenton's Reef lightship, and almost immediately ran into a dense fog. We kept on, headed for the Sow and Pigs lightship off the western entrance to Martha's Vineyard Sound, about seventeen miles from Brenton's Reef. In due course we heard her fog signal right ahead, which verified our compass course; but before long we suddenly ceased hearing it and were greatly perplexed. When we had run the distance I so informed the captain and advised against standing on without some check for the position, for the course changed there for entering the Sound. The captain had hardly rung to stop, before a tremendous blast sounded right alongside and we made out the outline of the lightship not fifty yards away. We investigated the matter afterwards, and learned that there had been no interruption of the whistle at that time. It was simply a noteworthy instance of the aberration of sound, which under certain conditions of varied temperature causes its horizontal carriage to be broken by zones of silence when the vibrations are refracted

upward over large areas but may return to the surface farther away.

That, of itself, was an interesting incident; but what was uppermost in our minds at that time was the problem of entering Martha's Vineyard Sound and finding Wood's Hole in a dense fog which would soon be reinforced by the shades of dusk. Captain Tanner said that it would never do to let the Secretary of Navy think that a naval vessel could not go through a fog. Shortly afterwards he added, "I'll hold her here by the lightship. You go and work out the tides and currents, and courses and distances, and we'll stand on." So I went into the chart house and studied the probable strengths of the currents which run from one and a half to two and a half knots an hour, eastward at one time of the tide and westward at another, and are deflected partially into or out of Buzzard's Bay. From this study I made out a little table of courses to be run, with the number of miles and tenths to be made on each, to carry us into and up the Sound clear of Lucas Shoal and the Middle Ground on the starboard hand and of the Elizabeth Islands on the port hand; fortunately the shores of the latter are quite bold and steep-to. It was about eighteen miles from there to Wood's Hole. As soon as I returned to the bridge we started ahead, having cautioned the engine room that it was important to maintain a uniform rate of speed, and having the comfortable assurance that that could be relied upon. It was very blind running; but we made the courses and distances carefully and were prepared for any eventuality. As we approached the completion of the run, I said to the captain that I thought we probably had not reached abreast of Wood's Hole, but pointed out that there

would be danger in overrunning because of the foul ground off Falmouth beyond, and suggested that we stop the engines and put the helm a-starboard and we might then see or hear something. This was done. Fortunately, it was deathly still. The officer of the deck had taken station on the forecastle, and I hailed him and asked if he could see anything. He replied: "No, sir, but I hear a cock crowing right ahead." That showed we were on the safe side of the channel, and we remained there for a while with the hand lead over; but after some minutes a light struggled through a rift in the fog close by, and remained in sight long enough for us to get a bearing and to recognize it as Tarpaulin Cove light, four miles from Wood's Hole. Knowing Tarpaulin Cove to have a clean bottom, we made for it and anchored, and at four the next morning, the fog having lifted, we ran into Wood's Hole; and the Secretary of the Navy was not delayed at all events.

Like all pleasant cruises, that of the *Albatross* had to come to an end some time. In January, 1885, when the ship was preparing for the winter's work in southern waters, all of us who had been on board from the date of commissioning, except Captain Tanner, were detached. It had been an exceptionally pleasant cruise. A safe rule to accept is that a busy ship is a happy one; and the *Albatross* was no exception. Moreover, besides being busy, we were a congenial mess and did not get tired of each other, as might well have been the case with so much of the time passed in the isolation of the sea. We separated with cordial feelings all around.

## CHAPTER VIII

OFFICE OF NAVAL INTELLIGENCE—U.S.S. "VESUVIUS"

On the staff of Count Saigo, Minister of the Navy of Japan —Instruction at Torpedo Station—Driggs-Schroeder rapid fire gun—Critics of pneumatic system—Difficulties in early days—Attached to a squadron—Heavy weather—Abortive firing trial—Preparing for war with Chile—Gun trials at Port Royal—Review on four hundredth anniversary of discovery of America.

THE office of Naval Intelligence was given official existence and a start through the persevering initiative of Lieutenant T. B. M. Mason, of my class, to whom honor is due for his vision. Its beginning was on a very humble scale, consisting at first of not much more than a desk in the Navy Department, under the Bureau of Navigation; but it worked its own expansion, so that by 1885 it had an organization, and adequate quarters and personnel for its work. At the end of that year the Chief Intelligence Officer was Lieutenant R. P. Rodgers, of my class and senior to me; furthermore, he was a boyhood companion before we entered the Academy. Anticipating my detachment from the *Albatross,* he asked if I would not come to duty there, which I was very glad to do. I reported under orders immediately upon leaving my ship.

Association with the development of something new always stimulates enthusiasm, and every one was very industrious. Apart from that I found the

duty interesting and educational in that our function was to obtain and classify all possible information upon military and naval subjects. The objection was sometimes made by others that the knowledge thus acquired was somewhat encyclopedic, and to a certain extent this was true; but it was also true that most information concerning foreign (and possibly hostile) services was of that nature. Personally each officer in that office benefited by having to prepare an article each year, for publication in the *Annual,* bearing upon some important subject connected with naval development or some branch of professional knowledge; the study and research necessary with that in view could not fail to be beneficial.

And so nearly two and a half years passed in the companionship of my family and engaged in pleasant duty. During about three weeks in the summer of 1886 I was detailed to accompany Count Saigo, the Minister of the Navy of Japan, who was visiting this country. All the members of his staff spoke English and were very companionable men. We visited various naval and private establishments, and witnessed several interesting exhibitions, which otherwise I might never have had the opportunity to see; one of these exhibitions, however, made me fairly hang my head. It was at the Naval Training Station at Newport; the party was escorted about the grounds and then taken on board the stationary training ship where the crew were at quarters and the officers at the gangway to receive the distinguished visitor. Being asked if he would like to see a gun drill, the Count replied that he would,—and he was shown it: the broadside gun drill of a cast-iron smoothbore on a wooden Marsilly carriage with breeching and

side and train tackles. I remarked somewhat shamefacedly to one of the aides that I feared the Minister would not be greatly interested in that, but the reply was, "Oh, no; not so, the Minister is very much interested; he has never seen a gun like that before."

I was luckily able to check what would perhaps have been still more unfortunate. I happened to hear the Executive Officer of the ship, as we came over the gangway, say to a messenger, "Tell the bandmaster to play some selection from 'The Mikado';" and I just had time to shout in a whisper, "Stop. It would be an insult. They are not permitted to see that burlesque."

Not long after this episode the State Department received from the Japanese Government a Decoration of the Fourth Class of the Order of the Rising Sun for me; but under a wise provision in the constitution acceptance of it was prohibited, and it had to be returned.

During the summer of 1888 I was one of a class formed for instruction in electricity and torpedoes at the Torpedo Station at Newport. The summer climate of that vicinity is markedly preferable to that of Washington, and it was a pleasantly convenient opportunity for my family and me to profit by, at the same time that I should take that course. The instruction in electricity was not successful. The course in high explosives, however, was practical, and also in torpedoes. I had one mishap but it was not serious. Being in charge of a large steam launch fitted with a bow spar torpedo, I maneuvered to attack a small, wooden float and explode the torpedo under it; but the torpedo (a small exercise one) had become detached from the end of the spar and

swung in toward the boat, and when I pressed the firing key we were verily "hoist with our own petard." No one was hurt, though we were all well shaken up, and we got the boat ashore before she sank. I was rather amusingly reminded of the occurrence a couple of years later when a seaman gunner desiring to come to the *Vesuvius,* which I commanded, wrote to me asking to get him transferred, mentioning by way of pleasant introduction, "I was along with you at Newport the time you blew up that launch."

We were also given practice in submarine work in a diving suit. It was not obligatory, but most of us went down. I hated it the first time, but afterwards I did not mind, and walked about on the bottom for quite a while in about fifty feet of water.

Practicing with searchlights led to something in the way of exercise that was not in the curriculum. I had taken a little cottage for the summer in Jamestown, on Conanicut Island, across the bay from Newport, going back and forth in the ferryboat. But that ferry did not run after dark, and, therefore, I had to find other means of getting home after the searchlight practice which was on every fifth night. There was another officer in the class, Lieutenant Charles Belknap, who was also living in Jamestown, and he had a two-pair, double-scull boat, which he proposed that we should use, pulling ourselves over in it on the required evenings and back at half-past ten when the exercise was finished. I accepted gladly. It was before the day of motor boats. It was a little dreary perhaps, especially on other than pleasant nights; but we were both good oarsmen and did not mind the two-mile pull over and the same back. We were generally fortunate in weather; but

one night, after we got over, such bad weather came on that we had to stay at a hotel for the night and start out early in the morning in order to get home in time to change our clothes and take the ferryboat back for the regular morning class work. There was no great hardship in that, but our families passed an anxious night, not knowing whether we had stayed in Newport or started back and been capsized in the storm. It was before the day of telephones.

Upon the completion of the course at the Torpedo Station I received orders and reported on board the *Richmond,* an old-time, wooden vessel that had served through the Civil War. When I looked upon those broadside, smoothbore guns on wooden carriages and down through the engine-room hatch on the ponderous, antique, simple (single expansion) engine, and on the lines of the hull which were those of a "brine bruiser" as compared with the *Benicia* and the *Swatara,* I was hardly consoled by a glance at the good, honest square-rig overhead. But somebody had to go in such ships, and there was no reason why I should not go as well as others.

An unexpected turn of the wheel, however, changed my prospects completely. One day, while the ship was fitting out at New York, I received telegraphic orders to come to Washington and report to the Secretary of the Navy. The result was that I was shortly afterwards detached from my ship and ordered to duty in connection with the construction and equipment of the pneumatic gun vessel *Vesuvius* then nearing completion at the Cramps' shipyard in Philadelphia, with a view to commanding her later.

In the regeneration of our Navy, just then beginning, there was a somewhat natural reaching out, groping for some naval development that would

make a long step in advance, and incidentally give prestige to the political party which was enjoying a brief respite from its long exile from executive power. A pneumatic gun was in process of development for both army and navy armament, and an appropriation had been made for the construction of a vessel to carry three of them, the contract was awarded, and the vessel was thought to be near completion. The very progressive Secretary of the Navy, Mr. William C. Whitney, was as eager as was the company that the venture should prove successful. It appears that the President of the company, while making inquiries among naval officers as to who would be a good man to put in command, had stumbled upon friends of mine, as a result of which he asked if it would be agreeable to me. He did not have to ask twice.

Thus it came about that I was ordered to the Cramps' shipyard, full of joyous anticipations, which were fulfilled in time; but it was a very long time. For twenty months I danced attendance upon that little ship, away from home and yet on shore duty and the old Navy shore pay, hoping each month that the next would see a successful functioning of the air valves regulating the amount of compressed air admitted to the guns and thus determining the initial velocity and the range. But it was a continuous succession of disappointments until the spring of 1890.

During leisure hours in that tiresome delay I occupied myself with computations for a rapid-fire gun that Lieutenant William H. Driggs and I were developing—the Driggs-Schroeder gun. The original design of breech mechanism had been devised wholly by Lieutenant Driggs; I suggested some mod-

ifications which seemed necessary and which he skillfully incorporated, and we perfected the gun together, he attending to the breech mechanism and I to the construction and ballistics of the body. An important feature of the mechanism was its lightness, which enabled me to use the spare weight in lengthening the gun, thus obtaining a greater length of bore and greater initial velocity of projectile, with the same weight of gun as compared with others of the rapid-fire type. I also introduced a rifling of more rapid twist than was in vogue at that time, thus improving the ballistics by causing the projectile to be steady in its flight from the instant of leaving the muzzle, which we showed was not the case generally. We built a gun and entered it in competition, and at the first trials achieved quite a victory; then our competitors, spurred on by the necessities of the case, improved their guns, and the rivalry went merrily on. A company was formed for the manufacture of our gun and quite a number were built. I did not assume any office in that company; nevertheless, I found the situation full of embarrassment, and before long disposed of my interest in it on terms satisfactory to all parties.

The *Vesuvius* was at length successfully carried through her speed trials, making about twenty-one and a half knots, which was fast-going then. The air valves were also perfected, the regulation of air admission being apparently well under control, and the vessel was taken down the river for a firing trial to test the ranging and the exceedingly complex fuses required to meet the peculiar elements of the problem. One shell was fired from each of the three guns; they were subcaliber shells carrying one hundred pounds of dynamite, and were fitted with fuses

set to different lengths of delay action, one having no delay, and the other two having delays of different numbers of seconds. When fired, the detonations appeared to be complete, and stopwatches indicated the time between splash and detonation as correct to as close a degree as it was possible to observe. In the shot where no delay action was introduced, the flash of the detonation was seen above water.

The vessel was then accepted, and I was ordered to the command which I assumed when she was put in commission in June, 1890.

The administration in Washington had changed since the *Vesuvius* was ordered, and the attitude of the Navy Department, while not inimical, had become undoubtedly less cordial. Professional opinion in the Navy had always been tinged with doubt, to say the least, as to the military value of the air discharge, and this is not to be wondered at. Personally I shared the doubts myself; but I was instinctively convinced that, in determining the value of a new development, the only true way is to devote every effort to bring out what it *can* accomplish rather than to try to show what it *cannot*.

Briefly stated, the object sought in the employment of air discharge in place of powder was to eject the projectile by means of a moderate and safely controlled pressure so that the containing shell, not being exposed to high pressure or heat, could be quite light in construction and, therefore, could contain a greater proportion of explosive. The low pressure, of course, must result in a diminished range. So the question was broadly one of short range and big charge of explosive, or long range and small charge. Intimately associated with long range is also the power to perforate armor, which required

a projectile capable of standing up under the impact —a manufacturing problem that has been continually made more and more difficult by the remarkable improvements in armor. There was much able discussion about it, involving subsidiary questions that could not well be even summed up in less than a complete essay.

The initial air pressure to be used in the guns had been fixed at one thousand pounds per square inch. After some study I reduced that to seven hundred and fifty pounds, for tactical reasons, chief among which was the fact that the capacity of the storage reservoirs was insufficient to permit firing continuously at full range the thirty projectiles carried. There might be occasions for utilizing the greatest possible range; but, so far as I could see, immediate probable conditions would be best served by ability to maintain continuous fire. The air-storage reservoirs were pumped to a pressure of two thousands pounds, the air being drawn from them into the firing reservoirs and the pressure in the latter restored after each discharge. It is a curious fact that the actual weight of air in all reservoirs when filled to pressure was about three tons; the vessel displaced (weighed) three tons more with the reservoirs under pressure than when they were empty.

As is frequently the case, the pneumatic gun's staunchest friends became its worst enemies; they claimed for it immediate and entire revolution in warfare. But since the introduction of steam power revolutions in naval warfare have not been lightly recognized. On the other hand, equally prejudiced opponents confused the question by considering the gun in the light of the design of the vessel that carried it and even by the failure of some wholly

independent accessory. Probably the best pronouncement on the subject was contained in the report of the first Naval Board to consider it, wherein it was reported as "a new instrument of warfare which has its own functions in time of war. It cannot replace any existing weapon, nor can its place be wholly taken by any other."

It was some time after commissioning before any steps were taken to determine the practical value of the *Vesuvius;* that was perhaps just as well for a while, as I have rarely known a vessel so little ready for service. She was a small vessel, of less than one thousand tons, and built with scant regard for anything but high speed and the carrying of those long pneumatic guns. She was of a beautifully graceful shape, a pleasure to look at; but no tactical considerations entered into the design. In one way or another her issuing into service was attended by a travail which taxed the patience of one who, though far from young (except officially), was enjoying his first command.

We all formed one mess on board, there being a medical officer, an engineer officer, two watch and division officers, and the Executive. Partly because the Executive had to stand watch at sea and partly because of my fondness for the work, I took upon myself the duty of navigating, including compass work and all that. And that compass work was no small affair. The three pneumatic guns, about fifty-five feet long and of fifteen inches bore, were of cast-iron which is physically hard but magnetically soft; and they were permanently installed at an angle of elevation of eighteen degrees, so that when the vessel was heading south (in the northern hemisphere) they pointed downward in a direction not

greatly divergent from the line of magnetic dip. As a result the local deviation of the standard compass on some courses was nearly 70 degrees while the directive force was nearly *nil.* That had to be corrected; what is commonplace to-day was fairly new then. But by holding her by hawsers rigidly on two courses, and making observations of deviation and of horizontal and vertical force on those courses and at a nonmagnetic spot on shore, I got the quadrantal spheres and the magnets so placed as apparently to eliminate all error. Upon reaching the open sea where there was room to swing ship, I found, a week later, that the maximum deviation on any course was about a degree and a half. It so happened that a week after that I was called upon to run at fifteen to sixteen knots in a thick fog along the southern shore of Long Island, trusting entirely to the compass. But it was all right. The cause of that run was sudden orders to be at a certain position off Block Island at a certain time to assist in the speed trials of the cruiser *Philadelphia.* Leaving Sandy Hook at half-past four in the morning, we immediately encountered fog.

Eleven days after going into commission we left the Philadelphia Navy Yard under orders for New York; it was then that our troubles began. We cast off at about half-past five in the morning, and at six o'clock we were hard and fast aground a couple of miles down the reach. We had stopped and maneuvered a bit to avoid some vessels, and, after signaling to back the port engine, I became aware that the engine was going ahead, the ship then being pointed across the stream. Signal was instantly made to stop that engine and to back hard on the starboard engine; the former order was promptly obeyed, but

the starboard engine was put ahead full speed with the result that we rammed the broadside of an island so hard that the machinist at the starting levers knew there was something wrong and stopped everything. Attention being thus called to it, it was realized that the position and direction of the starting levers in that confined space were such as to make it quite possible for the engineer to get "galleyed" and move them wrong, and that machinist had taken about the first opportunity to do so. Some hours afterwards with the help of a tug we got off with a rising tide, without material damage. The same thing did not happen often again, but for some time there was an uneasy feeling in handling her about a navy yard.

On the very next day we reached New York and proceeded to the Navy Yard. As we approached the Ordnance Dock obliquely, I rang to back the port engine so as to swing alongside; but for some reason that port engine would not back, and we rammed the Ordnance Dock—fortunately not very hard, whereupon that port engine suddenly started to back at full speed with a jerk that gave the stern a violent shake. Those little engines each developed two thousand horse power. Investigation showed that some part of the reversing gear included a sleeve that should move when the link was reversed; there was no apparent reason why that sleeve should not move, but it didn't, that was all. The error in design was soon corrected, and there was no more trouble.

Another awkward discovery was made in trying to put the helm over when running at about half speed, or fourteen knots; it would go only half over. After trying to find something wrong with the transmission, we decided that it was simply that the steering engine did not have power enough to put the

rudder over at high speed. There was no room for a bigger steering engine, so we had to accept the fact that, at high speeds, only half helm would be available, which, coupled with the proportion of a length equal to ten times the breadth of beam, and a deep bar keel, resulted in our taking two thousand yards, or about a nautical mile to turn, while the cruisers of the fleet would take less than half that distance.

There was one thing that I was truly glad to have corrected. At the break of the forecastle, immediately over the breeches of the pneumatic guns, was the conning tower from which the ship was steered and the guns were fired. It could be entered only from below. After a few little mishaps, attended by a good deal of banging things about and loud hissing of compressed air, it occurred to me that if anything serious were to happen to the air tanks or valves and the hull of the ship should be injured, the quartermaster and I, handling her from the conning tower, would have to go down to the bottom of the ship to get out. I wrote a letter to the Department asking that a door be fitted to the tower above the deck. The request was "turned down." But I watched my opportunity, and while at a navy yard, the Chief Constructor of the Navy happened to come there. I invited him on board and, after speaking in glowing terms of the interior of the conning tower, asked if he would not like to step in to have a look. He assented and I led the way. But after stepping down to the berth deck and seeing that he would have to climb down to the bottom of the hold and then up, he said he would take my word for it. Then I put it to him that I did not mind climbing up there and down again for the frequent exercises but that in

case of serious accident the quartermaster and I would be trapped; and when I said that my request for a door had been disapproved, he said, "Send in a request for a reconsideration;" which I did.

As time passed and all things had been remedied that could be remedied, and we became accustomed to things that could not be remedied, the little ship took on the character of an ordinary vessel, not a "freak" as she was sometimes called. Minor experimentation was going on all the time with the pneumatic guns, under the personal direction of Lieutenant H. M. Dombaugh; but apart from them we had three secondary battery guns at which the crews were kept drilling, and all usual ship drills were kept up. While we did not have enough men in the crew to form a standard company of infantry we had one complete section, or half company, and with it, taking advantage of being at a navy yard, Ensign Maxwell actually worked out a wall-scaling drill for which there was then no manual and that drill was adopted for the Navy. Our biggest boat was a four-oared whaleboat, which prevented us from entering classic events in athletics; but we held our own among the small fry.

There was a reform in handling the *personnel* of the Navy which I had long regarded as mandatory, and which I had the opportunity of inaugurating on board one vessel at least, however small, with the hope that it would spread. A custom, handed down from ancient times in the British Navy, required that at Sunday morning muster the men, in answering to their names, should pass around the capstern and before the officers bareheaded. It was an abasing procedure, which I could see no reason for, as the division officers reported absentees. Upon looking

the matter up I found that the origin of the custom, generations before, was as a check on the paymasters to make sure that there was a man for every name and that dead men were not still carried on the books and their pay drawn by the paymaster or his assistants. A curiously heeded maintenance of an ancient custom; I disregarded it entirely and others came to disregard it in much the same way, so it has gradually become obsolete.

The anxiety of the Navy to begin tactical work with ships may be shown by our pleasure in the fact that, when the famous "White Squadron," known as the Squadron of Evolutions, returned from Europe under the command of Commodore John G. Walker, in the flagship *Chicago,* the *Vesuvius* was added to it, and we took part in the maneuvers "like a real ship," which resulted in professional benefit to us all. As other new steel ships were completed, they also were assigned to the North Atlantic Station, and as white lead was ordered for painting all iron or steel ships, the term "White Squadron" lost its significance, and that group of ships became one of several squadrons of the Station. The *Vesuvius* occasionally would be transferred from one to another squadron. It was awkward when our lack of tactical qualities became apparent; but as the speed of those longer vessels was very moderate as compared with ours, we did not often have occasion to turn at high speed.

There was, however, another feature in our tactical unhandiness that sometimes hurt our feelings; the vessel was of such narrow beam that, in order to get the engines in, the shafts had to converge forward so sharply that the prolongation of their axes would meet within the limits of the ship. The effect of this

was that backing one engine and going ahead on the other was of no avail in trying to turn without headway, as in getting under way in a restricted harbor or narrow channel. Still, we managed to get along, and accompanied the squadron very often.

The concentration of unusual weights near the bottom of the ship, air compressors, air reservoirs, etc., endowed us with an excessive metacentric height, with all the attendant discomforts in a seaway. She was heeled once in a wet dock to locate the metacenter; I never learned precisely what the height was, but her behavior in a seaway confirmed entirely the expectation based upon general observation of the position of the weights. Once when we had been at Gloucester for some days and started out with a squadron, the course lay across Stellwagen Bank where, as the wind was fresh from the eastward, the sea was quite short and wall-sided, and we began tumbling about in a way that we knew well but that seemed excessive to the flagship, the *Philadelphia.* Admiral Gherardi wanted to give us permission to return to port, and as signaling then was much more cumbersome than now, they began to signal by the so-called Telegraphic Code: "If—sea—is—too—heavy . . .;" just then the *Vesuvius* gave a tremendous roll, and they annulled that signal and made the single sentence in one hoist, "Return to port at once." But I did not like to be looked down on in that way, and found a signal in the book and hoisted it, "Ship is safe." Then, after a while, the flagship signaled, "You may take position under our lee;" but, knowing that we would soon be off that bank, and in smoother water, I replied, "Thank you, we are doing very well." However uncomfortable it might be for the moment, the very feature that caused

that discomfort of violent rolling was a guaranty against the danger of capsizing, and it was well for all hands to understand that. So we kept on and entered port in company, and the Admiral made some pleasant remarks as we passed him in going to the anchorage.

The multifarious duties of a unit of the fleet took us through varying scenes besides tactical maneuvers, target practice, etc. In May, 1892, in company with the flagship *Philadelphia* and the *Newark,* we proceeded to Savannah to help out in a gala week there. The other two had to remain outside, but Admiral Gherardi shifted his flag to the old sloop of war *Kearsarge* which had arrived and which, being only 600 tons larger than the *Vesuvius,* went up the river and was moored to a wharf for convenience. That was the ship that had sunk the *Alabama* at the end of the Civil War, and whose name was continued in later years by being given to a battleship that was built soon after her loss on Roncador Reef. She was already beginning to see the procession pass by, leaving ships of her class to be scrapped, however dear in association.

The *Vesuvius* also went up the Savannah River, and a great amount of delightful hospitality was lavished upon us. The attractive appearance of the Forest City with its broad, shaded streets, prepossessed visitors instantly; and the suburban regions, with the fine, public park and stately trees draped with Spanish moss, were an ideal environment for picnics, drives and pleasure parties of all kinds. In turn Admiral Gherardi used us as a tender, taking several large parties out to see the other ships which at times would even be engaged in target practice.

Upon another occasion of a gala week, six months

later, we had a rather serious precursory experience. We were for the moment at the New York Navy Yard for some minor work on the pneumatic guns, when a telegram came from Washington one afternoon asking how soon we could go to Charleston, South Carolina, for a celebration. The answer was "As soon as we can get coal." That was immediately ordered and we got out about midnight, leaving a number of liberty men behind whom we had been unable to recall. A gala week was in contemplation to begin on October 29, and, as the orders reached us on October 27, there was no time for delay. But we had hardly passed Cape Hatteras when the wind and sea began to rise from the southward, and off Frying Pan Shoals it was blowing hard and very rough. We soon began to ship green seas over the bows which compelled us to slow down. There was one serious defect in the structural design of the hull which had impressed me from the very first. At about eighty feet from the bow there was a break in the continuity of the deck, there being a slightly raised forecastle from there forward, so that the important element of strength in so long and shallow a body was defective in that the top of the ship, regarded as a girder, was interrupted, and only the steel plating of the sides afforded longitudinal strength. The occasion was now at hand, and in the midst of that gale some loud snapping announced the shearing of some rivets about the conning tower, and the cry arose that she was breaking in two. The only way to meet that was to slow the engines still more and head away a little from the sea; that diminished the pitching, but then we rolled 40 degrees each side of the perpendicular twelve times a minute. Not long after, the starboard engine stopped and

the engine room reported that the eccentric strap of a low pressure cylinder had broken. There was nothing very serious about that, however, as she could run well enough with one engine, and in time that strap was disconnected and the engine was run without that cylinder. Upon arrival, which occurred on time, I was able to report the vessel still ready for any duty not requiring top speed.

The people and municipality of Charleston were exceedingly hospitable. Indeed, we had to take good care of ourselves and husband our strength to meet all claims upon it. We came away with the Admiral, most pleasantly impressed.

The year 1891 had been ushered out with rumbling alarms of war which had grown more and more defined as the new year came in, and it was recognized that, isolated as we were from the rest of the world and safe from serious attack, the seas would have to be traversed for us to assume a proper offensive against Chile. In the fever of preparation that always comes when an unprepared country is suddenly confronted with such an emergency, even the *Vesuvius* was rescued from oblivion and we were rushed to the New York Navy Yard to be put in thorough condition for active service. As no one outside the ship had given much thought to her, it was natural that all suggestions should come from us and we had everything at the "tips of our tongues." Measurements were taken and preparations made to secure a strake of one-inch steel armor on the sides abreast of the engine rooms so that we would not be at the mercy of any little launch carrying a one-pounder gun. Hooks were fitted under the cowl of the conning tower, and a shot of our own chain cable was roused up and carefully placed and secured

there, thus adding material protection to that "brain cell." We knew exactly what was wanted in connection with the pneumatic gun valves, and there was a firm in Hoboken that had done much work on them, so the only thing necessary was to cut red tape. Sturdy Commodore Erben, Commandant of the Yard, did that with a decisive promptness that was heart warming. "Whenever you need anything that I can approve, get it. If you need Departmental approval send a telegram and add 'Approved, Erben,' and let me have a copy."

Nothing for us was likely to be sidetracked for work for any other ship, because we and the double-turreted monitor, *Miantanomah,* were to open the ball, starting out together and working our way in company to the Strait of Magellan and the Pacific. We lay side by side, so that I was in frequent conference with Captain Sicard, the commander of that monitor. It was an interesting time; and even when the specter of war had been exorcised, the fillip given to a good many was not without excellent effect.

That little war scare undoubtedly had some effect in bringing about a trial of the *Vesuvius,* though it took some time definitely to arrange it. In May, 1891, there had been an abortive attempt at something of the kind, but the departmental lack of familiarity with the conditions was strikingly shown in the astonishment of the Board upon suddenly coming on board at Hampton Roads and learning that the guns had not been ranged and that no sight had been fitted. Ranging the guns consisted in finding by trial what valve settings would send the projectile certain distances. We had never had projectiles, so we had had no opportunity to find the range of the guns. In the matter of the sight, the guns were permanently built

in the ship and would be pointed by pointing the ship. The ship, therefore, would manifestly have to be pointed as accurately as would a gun; and, furthermore, especially as it was high-angle fire, allowance would have to be made for the movement of the enemy target across the line of fire, and for the wind.

The Senior Member of the Board was Commander R. D. Evans. It was decided to let us expend some projectiles in establishing at least a rough table of valve settings, so I rigged up a rough jury sight. The general plan was to fire a certain number of shots at a stationary target, and afterwards to fire three shots at a cutter being towed directly across the line of fire at the rate of ten knots an hour, the *Vesuvius* advancing at about seventeen knots. The results were greatly affected by one extraordinary clause in the instructions to the Board,—that the firing should be "by word of command." The only person able to know when the sights were on was the captain at the firing levers in the tower, and, even with a stationary target, to keep a vessel accurately pointed in continuous aim on a spar buoy half a mile to a mile away was a manifest impossibility. The word, therefore, came to fire sometimes when the ship was pointed a little off, making the gun apparently in error to the amount of fifty yards laterally. In spite of that, of the nine shots fired in that way from distances varying between eight hundred and eighty yards and seventeen hundred and fifty yards, one was a "bull's-eye," and three would have struck a vessel three hundred feet long by twenty broad, head on, supposing her height out of water to be fifteen feet.

As for the practice at a moving target: the time of flight of the shell being about twelve seconds, the

lateral displacement of the cutter moving at ten knots speed should be about two hundred feet by the time the shell reached it. Without wind or speed-of-enemy attachment on a sight, like that on all high-powered guns, and with the boat frequently lost in the white caps and spray as it bounded from crest to crest of a moderate sea, the result depended entirely upon the judgment and skill of the firer who had to steer the vessel on a curved course and keep pointed at an estimated distance of two hundred feet ahead of that moving speck, at the same time that the valve settings were steadily being changed by the division officer to correspond with the estimated ranges furnished him. Under these conditions, of the three shots one was a line shot, and the maximum lateral error, at a mile, was less than the deviation allowed for the acceptance of service automobile torpedoes when fired from a fixed platform in smooth and still water, at a stationary target. As regarded the total accuracy, longitudinal and lateral, one shot would have struck a vessel, regarding which the report of the Board said: "This the Board considers a favorable showing under the circumstances."

Take it all in all, we were rather pleased with the outcome, though disappointed at not having a more rational opportunity to demonstrate what the vessel could or could not do. As one result, authority was given to the Norfolk Navy Yard to fit a simple gridiron sight which I devised between the muzzles of two of the guns which, with the movable sighting wire at a peep hole of the conning tower, furnished a sight radius of fifty-three and one-half feet. The speed-of-enemy allowance was effected by using one or another of the vertical rods of the front gridiron sights.

While that trial probably made it patent to the

Department that the system had been underestimated, it apparently took the Chilean war scare to bring about serious consideration of it. In August, 1892, I obtained permission to take the vessel to New London and lay off a range in the Thames, downstream from the old Naval Station above the bridge, to establish the valve settings. With our own officers we established and located triangulation stations on the banks from which to plot the falls of shots, and were all ready to begin firing when telegraphic orders were received to proceed without delay to Baltimore for some celebration there. Immediately after that there was a gathering of available ships in an attempt to have a celebration of the four hundredth anniversary of the landing of Columbus. While a few foreign ships came in response to the invitation, and there were some "functions" carried on in New York harbor, it was a lame affair, and it was finally decided to hold the celebration in the spring of 1893, contemporaneously with the belated World's Columbian Exposition at Chicago. Then came the gala week in Charleston in November. But at last, in January, 1893, we went to Port Royal for trial.

It took some days to remedy the effects of rough weather during the passage down the coast, holds having been flooded, boats washed away, etc; but within a week we had established the stations for plotting the falls in ranging the guns. The Board, of which Captain Montgomery Sicard was senior member, grasped the matter in a most painstaking way and prosecuted the work searchingly. First, dummy shell were fired to test the accuracy at ranges of fifteen hundred and two thousand yards; then live shell, holding varying amounts of powder or guncotton, were fired, mostly over water, but a few

against a hard beach. Regarding the results as a whole, there is little to be said beyond the simple statement that the pneumatic gun seemingly found its Waterloo in the failure of the fuse to act because of the shearing pins of the safety sleeve being too heavy, so that they were not sheared by the shock of discharge. Thus the projectiles were not "armed" during flight and did not explode on impact. The design of the fuse was perhaps also defective in the fulminate not being in sufficiently intimate contact with the dry cotton primer; and the fulminate may have been weak, being of commercial make. But there can be little doubt that the prohibitive trouble was with the shearing pins, as shown by this:

One shell, loaded with about one hundred pounds of explosive, had been fired against a fairly hard sand beach. In order surely to gain any possible information from the conditions within the fuse after impact, I dismounted it myself very carefully where it was on the beach, keeping the head of the long shell securely tilted up to guard against the ball rolling forward against the fulminate cap. (The mechanism consisted of a metal ball, held lightly in place by a spring, and which upon impact would plunge forward and strike the fulminate, the whole being inclosed within a safety sleeve which was held in place by the pins until the shock of discharge should shear them, and, by moving the sleeve back, uncover its windows.) Upon dismounting the fuse a positive and interesting clew was found. The pins were sheared, but a small bit of steel spring had been broken off and was wedged in one of the windows of the sleeve, a circumstance which could not exist except by the projectile striking the beach, and the ball breaking the spring, *previous* to those pins being

sheared. It had been observed that the shell on striking the beach turned a complete somersault and struck solidly again farther on, base first; undoubtedly it was the violent shock of this second blow that sheared the pins, the effort being in the same direction as the shock of discharge and more violent. It is certain, therefore, that the impulse for the range for which that shot was fired did not liberate the safety sleeve.

In any event it was a veritable anticlimax. It was shown that ranges could be accurately attained; and shells, loaded with guncotton or dynamite or explosive gelatin, had been safely fired from the *Vesuvius's* guns and from others of the same system in both America and England, and accurately detonated; but this failure to accomplish the entire heralded object, however remediable the cause, was too much. There can be little doubt of the correctness of the Board's statement that the system "is of decided value in naval warfare;" that was quite well shown some years later in the war with Spain. But in the absence of any special champion immediately after the trial, the Pneumatic Gun Company being defunct, it may be said to have been fairly laughed out of the court of service opinion.

It cannot be said that we were not chagrined. While feeling that we had not done badly in bringing out what there was in the system, we realized that a positive success would have been more convincing as to the merits of our work. As it was, we returned to duty as a "unit" in the fleet, being of some use there at all events, especially as there was another function on hand.

This new function was a big one, being a belated assemblage of men of war from nearly all countries

to celebrate the four hundredth anniversary of the landing of Columbus, the formal review to take place at New York about May 1, in conjunction with the opening of the exposition in Chicago. Hampton Roads and adjacent waters furnished the rendezvous to which the foreigners were invited, and the first to arrive were the Russian ships, *General-Admiral* and *Rynda,* on April 8, reinforced later by the *Dimitri Donskoi.* Before that date, however, most of our ships had arrived, and, under the command of Rear Admiral Gherardi, exercised in the prospective Review formations and movements in Chesapeake Bay. This was especially needed because of the heterogeneous composition of our squadrons and the difficulty of making ships of less than nine hundred tons turn symmetrically with those of four thousand five hundred tons (our biggest) and maintain headway with them.

The English, as usual, had the most imposing array, consisting of the stately armored cruiser *Blake,* the *Australia,* the *Magicienne,* the *Tartar,* and the *Partridge,* all under the command of Vice Admiral Sir John Hopkins. The French ships were the *Jean Bart,* the *Aréthuse* and the *Hussard;* the German were the *Kaiserin Augusta* and the *Seeadler,* the former noted as being equipped with three screws, which always appealed strongly to me for ships of that size or larger. The Italian ships were the *Aetna,* the *Giovanni Bausan,* the *Eridano,* and the *Dogali,* under the command of Rear Admiral Magnaghi, an old friend of mine, he having been the Director of the Royal Observatory in Genoa at the time of the *Gettysburg's* visit. He remembered me very pleasantly, and I remembered well his genial assistance in furthering our examination of the Italian

coast. Holland was represented by the *Van Speyk,* and Argentina by the *Nueve de Julio.* Two Brazilians hove in sight as the armada passed out between the capes of Virginia, but did not catch up and join the formation until the next day.

Perhaps really the most interesting incident was the arrival on April 21, of the Spanish cruisers *Infanta Isabel, Nueva España,* and *Reina Regente,* with the three caravels, the *Santa Maria,* the *Pinta* and the *Niña,* facsimile reproductions of Columbus's ships. They had been towed across the ocean; but after anchoring, the *Santa Maria* got under way and, under her own fifteenth century rig, sailed down between the columns of vessels, eliciting much applause.

There was an immense amount of firing salutes during that time. Every squadron that came in had to salute the port, that is, a 21-gun salute to the American flag, which was returned. Every flag officer arriving saluted all flag officers senior to him and was saluted by all junior to him, both being returned gun for gun. Then when flag officers visited other ships, they had to be saluted personally; and one day, April 22, every ship present dressed ship in rainbow with the Italian flag at the main, and fired a national salute at eight o'clock, noon and sunset, in honor of the second anniversary of the marriage of the King and Queen of Italy. We used our pneumatic guns, adding to the noise but not to the smoke.

On April 24, the whole armada got under way and stood out, following the motions of Admiral Gherardi, and under his instructions for the passage up the coast to New York. It was a beautiful, quiet, moonlit night, and the spectacle was quite impressive, the ships being in three parallel columns, the British heading the right (offshore) column. On the morn-

ing of April 25 the fleet anchored in the lower bay, and on April 26 proceeded in two columns to an anchorage in the North River.

On April 27 the President arrived in the *Dolphin,* with Mrs. Cleveland. Every ship was dressed in rainbow, and, as the *Dolphin* passed, manned yards or rail, fired twenty-one guns, and cheered ship. After that the functions were social and on shore, except that there were boat races, in which the *Vesuvius* won in her classes.

I was quite impressed by a noticeable feature in the evident drilling of the Italian ships in these ceremonial events. It is a curious fact that, however lusty a ship's company may be, in cheering ship they gave a rather short and shrill note, also pronouncing the word "hurray;" this has become especially noticeable in recent years when a large proportion of the crew has been younger. But even in 1893 I noticed and applauded the deep-toned and prolonged hoo-oo-rah-ah of those Italians; they had evidently been drilled in cheering.

By May 10 the armada began to break up, and the *Vesuvius* was ordered to Gloucester to take part in the steaming trials of the *New York,* after which we went to Portsmouth, New Hampshire. On June 15, I was detached.

It had been a cruise of distinctly varied emotions, and for that reason, perhaps, all the happier. There was one thing that we were very glad of, and that was that, however belated, and however modified the success we had had with the pneumatic guns, the trials of the system had been held during our handling of it. Personally, apart from the special interest of the experiment, I had had a command.

In the next annual competition before the United

States Naval Institute, I entered an essay, taking for my subject "The U. S. S. *Vesuvius,* with special reference to her pneumatic battery," for which I was awarded the gold medal of that year. So, in all ways, the associations of those three years on board that little ship have been pleasant memories.

## CHAPTER IX

### U.S.S. "MASSACHUSETTS"—SANTIAGO CAMPAIGN

Board of Inspection and Survey—Speed trials—Organization—Flower Shows—War threatening—*Texas* and *Iowa* grounded—Flying Squadron—Admiral Sampson, commander in chief—Cienfuegos—Abortive firing at the *Cristobal Colon*—Admiral Sampson arrives—Strict blockade organized—*Merrimac* sunk in channel—Periodic bombardments—Searchlight watch—*Vesuvius* bombarding—Army arrives—Boats sent to land troops and stores—*Massachusetts* goes to Guantanamo—Spanish fleet comes out and is destroyed—*Reina Mercedes* sunk in the channel by the Spaniards—Expedition to Puerto Rico escorted by the *Massachusetts—Guanica—Ponce*—War ended—New York—Boston.

The '90's saw the activities and importance of the Board of Inspection and Survey greatly expanded, its field embracing the acceptance trials of the new-type ships that were beginning to form the new Navy, as well as the military inspections of the ships upon going into and out of commission. It was, therefore, becoming a duty of increasing importance and interest, and I was very glad to be detailed as recorder of that Board shortly after being detached from the *Vesuvius*. In the course of a few months, having in the meantime attained the grade of Lieutenant Commander, my duty was changed to that of member of the Board.

The headquarters of the Board was in Washing-

ton, where it remained in session between inspection trips perfecting its reports and making the necessary preparations for future ones. During the three years that I was on the Board the vessels that came before us included two of the first group of what were called Coast Line Battleships, the *Massachusetts* and the *Indiana,* of which group the third was the *Oregon,* built on the Pacific Coast. Those were good ships for their time, though naval development, having taken a start, was beginning to be very rapid, and their defects quickly became apparent and were avoided in later models. The original *Maine,* and the *Texas,* and also a number of less important units, came out at that time, the *Texas* being an English design.

There is perhaps no field of endeavor wherein one can more clearly discern the advantages of hindsight over foresight than in the design, construction and ultimate value of fighting ships. At the same time, there were instances of misconception of the requirements intended to be met, a visualizing of which necessarily came to that Board. The expression, "coördination," with special application to the bureaus of the Navy Department, was just beginning to feel its way to the front, and although not verbalized, the lack of it was indistinctly outlined in the background of some of the ships of that time. Serious discussion as to the necessity of coördination had perhaps not really begun in the '90's; but the problem was casting its shadow before. The time had not yet come for recognizing the value of a strong, consulting body; nor were such studies vested in the Board of Inspection; but there is no doubt that its inspections helped blaze the way. We really seem to have been groping in those days, in probably

much the same way that other naval powers had been groping when in about the same stage of development some twenty-five years earlier; but it was none the less interesting, the builders and bureaus calling their shots, so to speak, and the Board noting the hits, reporting failures and making recommendations.

The acceptance trials of big ships were occasions for the expenditure of large amounts of time, money and energy; their overshadowing feature was the speed determination, especially as, for some time, the contracts stipulated the payment of material bonuses for speed in excess of requirements. It was mandatory, therefore, that the attainment of speed should be unhindered and that its determination should be accurate. The former, as had been learned in recent years, was achievable only in deep water; this, obviously, was antagonistic to correct determination which required that the trial course lie within plain sight of accurately located landmarks in order to correctly place the buoys marking it, the course being straight and long enough to provide for four hours at full speed. Fortunately the boldness of the Cape Ann coast provided a sufficiently deep course within sighting distance, in clear weather, of various lighthouses which could be angled upon for placing the buoys. A lighthouse tender would be placed at the disposal of the subcommittee of the Board charged with laying out the course; and we would have a few days of yachting with incidental close sextant work. Sometimes we would have interruptions of one kind or another; one of an unusual kind was indicated by my thoughtlessly exclaiming once, "I wish that d—d whale would stop spouting." Many years ago the ground northward of Cape Ann was a noted

whaling ground, but the whales had all been killed or driven off. Yet apparently some were still found there, and it happened on the occasion to which I am referring that several right whales were disporting in the direction of certain lighttowers that I was trying to angle on, and when I thought I had the distant, white tower in my horizon glass, it would dissipate, being the straight spout of one of those whales in the misty distance.

There were some objections to that procedure in determining the speed. Vessels would be anchored near the buoys marking the course, from which observations would be made of the strength and set of the tidal currents, but it was feared that no very accurate data for correcting the speed could thus be obtained. In the course of time, therefore, the plan was adopted of very carefully standardizing the propellers for various speeds, and then having the vessel run at sea for four hours, noting the number of revolutions and picking out the speed from the speed curve. This was more satisfactory. But one shipbuilding company made a mistake in a plan it adopted, which consisted in directing the helmsman to put the rudder amidships and not to use it at all to keep a straight course in case the ship should swerve. Their idea was that any steam that might be used in the steering engine would thus be saved for the propelling engines, and also that the ship's speed and the power required to drive her would not be affected by any drag on the rudder. The saving of steam in a vessel that steered very wildly might perhaps be appreciable; but, when a vessel deviates from a straight course, her progress through the water is not precisely in a direction parallel to the keel but a little outward from that, and the resistance against

the outer bow is greater than the pressure on the rudder when used either to cause or to check the swerving; what diminishes the speed so greatly in turning is the pressure on the outer bow, not the pressure on the rudder. Perhaps the effect on the ultimate result is negligible either way.

The military inspections of new vessels after commissioning were of increasing interest and importance, due to the new guns and mounts with their sights and firing mechanisms, the electric and hydraulic machines, multifarious system of interior communication, etc. Much that was new was coming to the front and being added to constantly. One quite important investigation was of the effect of the blast from some guns upon persons stationed at neighboring guns, especially as between the 8-inch and the 13-inch gun turrets of the battleships. It was expected that the officers in the sighting hoods of the 13-inch turrets would suffer when the 8-inch guns were fired when pointed well forward of (or abaft) the beam; and that proved to be the case; but all that could be done was to draw attention to the defect and leave it to the captains of those ships so to organize firing that no sighting station should be occupied when the neighboring gun was about to be discharged when pointed nearer than a certain limit from it.

An important feature in that inspection duty lay in its keeping one abreast of the progress that was beginning to make leaps and bounds. I appreciated that particularly when I received orders, in December, 1896, detaching me from the Board and to duty as Executive Officer of the battleship *Massachusetts*. As we had conducted both the builders' trial and the military inspection of that ship and her sister, the

*Indiana,* I was so familiar with her plans which were, of course, very different from anything that the Navy had ever handled before, that I felt more at home in her than otherwise would have been the case.

The *Massachusetts* was of 10,200 tons displacement and carried four 13-inch, breech-loading, all-steel rifles in two turrets, eight 8-inch similar rifles in four turrets, four 6-inch, twenty Driggs-Schroeder 6-pounders as the secondary battery, and some above-water Whitehead torpedo tubes. Steel armor plate manufacture was at that time so much in its infancy that the 18-inch thickness of the water line belt was less efficient in resistance than perhaps one-half that thickness now; and similar proportions existed elsewhere. But that was not known then; and to dwell upon improvements that have followed on that first step would seem to belittle the comparative vigor of that step.

In service it lay naturally with the officers to recommend such changes as would in their opinion conduce to actual increase of efficiency, and the recommendations made were varied, some of major and some of minor importance. For instance, before I had been on board two weeks I submitted a written recommendation that the bow torpedo tube be removed and the space utilized to increase the lavatory accommodations of the crew. My argument was about like this: The tube being above water, and above the ram which projected eight feet forward, there would be danger of the ship, when advancing at full speed, overrunning the torpedo if the initial impulse were from any cause to fall short of what was intended. Also, with the torpedo lying in the tube at the cutwater, in the event (most improbable, I admit) of the ship actually ramming an enemy,

there would be almost a certainty of that torpedo being detonated right there, which would reduce the ship to immobility even if she kept afloat. The chances of that torpedo ever being used were virtually *nil*; and the space was needed for other purposes. The Captain agreed with me entirely, and forwarded the letter to the Department with endorsement of approval. The change was made at once.

In the matter of organization the entire elimination of sail power in the new type of ship tended to confirm modifications that were already appearing in the interest of simplicity. Independent of those modfications of station bills, the *Massachusetts* profited by the opportunity to give what was almost a creative impulse to a new feature which has since become universal and so commonplace that it seems difficult to credit the operation of the former system. An experiment had been tried on board a receiving ship at San Francisco in the method of messing the crew; and, while conditions affecting such arrangements are different in a stationary receiving ship from those in a cruising vessel, the plan seemed rational and promising. In all ships the ship's company was divided into messes, of fifteen to twenty, and all that the paymaster had to do was to issue to each mess a certain number of rations. The members of the individual messes then chipped in about two dollars a month for "spuds" and other luxuries, and this money was expended by the individual mess cooks. The inexperience, and sometimes even malfeasance, of those mess cooks would often produce unfortunate results. In the new system all the crew formed one big mess called the "general mess;" a certain limited number of rations were commuted and their money value was used by the officer in charge of commissary

matters for supplementing the simple and monotonous navy ration. In this way the men were spared the iniquitous, monthly contribution, and the benefits of intelligent supervision by an officer and the obtaining of supplies on a large scale were assured. The pay officers did not take kindly to the scheme at first, and, as it was an experiment and not sanctioned as a standard method by the Bureau of Provisions and Clothing, it was tried out in the *Massachusetts* under the supervision of an ensign who quickly made its advantages manifest. The system gradually won Departmental recognition, and the Pay Corps took hold of it with such intelligent energy that the old method soon became ancient history. What with that General Mess system, and the advances made in the preservation of vegetables, fruits and meats, the installation of refrigerating plants, and the general rise in standards of living, the enlisted man of to-day lives far more luxuriously than did the commissioned officer up to the '80's, or even the '90's in some ships.

The one thing that was perhaps a most persistent and painful thorn in the flesh than any other element in the make-up of the new ships was the all-important steering engine,—not in the *Massachusetts* alone, but in the larger vessels generally, as they would come out; and there is no doubt that, in the not infrequent instances of a ship in formation suddenly finding herself with the helm jammed one way or another, serious disaster was avoided mainly through the capability of the watch officers in meeting the contingency. Some of the situations verged upon the comical. It was some time before the causes of the failures were eliminated; with this elimination and other considerations in view, any kind of duty

that would keep ships in company was not without its benefits in the way of experience,—even "flower shows," as we dubbed any occasion for celebration at a port to which ships were sent.

The "flower shows" punctuated the months of drills and tactical evolutions; the first in which we had to participate was at Charleston, South Carolina, in February, 1897. The *Maine,* the *Indiana,* the *Columbia,* the *Massachusetts,* the *Vesuvius,* and two monitors, the *Amphitrite* and the *Puritan,* were assembled there with the flagship *New York.* A new direct channel from the harbor to the sea had been cut so that vessels of moderate draft could pass in and out freely, and small vessels did not need to follow the circuitous and difficult route that the *Vesuvius* had had to take some years before when I was in her. The new channel was destined in time to admit deep-draught ships, but in 1897 it was not practicable for battleships. With the *Vesuvius* and some lighthouse tenders communication was maintained, and balls and banquets were attended in force. That is not all that was done, however; one night the *Vesuvius* was sent to sea with orders to return during the night and to try to get through the cordon of ships undetected. We caught her with our searchlights, firing three rockets to notify her. On one other day we had target practice. In such ways we utilized all available time.

The target practices were dreadfully discouraging, though not so much so as they would have been if we had had any idea of the progress that the next ten years would show both in mechanical equipment and in training.

We were next called to Boston, in May, for the double purpose of assisting at the ceremonies at-

tending the unveiling of the Shaw memorial and of receiving the heroic, winged figure of Victory, done in bronze and secured to the front face of the forward 13-inch turret between the two guns. This figure, presented by the Commonwealth to her sturdy namesake, was a beautiful creation, and the unveiling of it was attended by impressive ceremonies in the way of dressing ship, speeches, firing a national salute, etc., followed by most enjoyable festivities on shore. We remained in port three weeks, the ship being thrown open to visitors most of the time with heavy floats alongside for their convenience, and we left there with warm feelings for our hosts and hostesses. We also took advantage of another visit, later, to embark the Naval Militia of that state for instruction with the battery, one day being passed in target practice at sea in which they proved themselves to be apt pupils.

One little touch of foreign cruising was given by a visit to St. Johns, Newfoundland, which we enjoyed very much, especially as it was the only foreign port visited during the two years and a quarter that I was on board—not counting Cuba and Puerto Rico, where we were not welcome, during the war with Spain.

That war had begun to loom threateningly by January, 1898, and on January 14 we left New York to join the squadron at Hampton Roads the next day. On January 16, we stood out to sea with it bound for Key West waters, under the command of Rear Admiral Sicard. Then troubles began to press. The *Indiana's* boilers began to leak, so that although she was not long out from a navy yard, they had to resort to every expedient to economize steam in order to keep up with the squadron. In a couple of days all expedients were inadequate, and, as it was the in-

tention that Key West should be reached before very long, the flagship *New York* took her in tow, and, by using what steam she could make also, the squadron proceeded at eight to nine knots. In the course of a short time, however, the *Indiana* reported that she could maintain position unaided, and the towline was cast off.

Key West and the Dry Tortugas were reached in due course; then all ships were stripped of boiler tubes, boilermakers and blacksmiths to get the *Indiana* in steaming trim. That was very satisfying as an instance of maintaining a fleet on its own resources; but we of the other ships present missed our mechanics badly. With war apparently coming on with a power whose naval feebleness we could not gauge, there was a feeling that, if that unfortunate ship had been ordered, or even towed, back to Norfolk or Newport News, as soon as her troubles were known to be serious, she would have been back in squadron in less time and better condition, and other ships would not have been disturbed. However, possibly it was not surmised how very extensive her troubles were, they being more readily appreciated afterwards.

The Dry Tortugas offered an attractive rendezvous for a small force such as the North Atlantic Fleet was at that time, as there was ample anchorage ground and a passage to the northward into Florida Bay as well as one to the southward. There was but one defect, and that was not known, though it was of vital importance; those waters, on coral ground, had not been surveyed for many years, and had probably never been "dragged" for coral heads in the thorough way that the Coast and Geodetic Survey has inaugurated in recent years. We were rudely

awakened one day while standing out through the northwest passage. We were the next astern of the *Texas,* and we saw her suddenly give a heavy lurch to starboard, then roll back to port, and, after a few more rolls, remain upright while proceeding on her way. It was quite apparent that she had grounded; all possible doubt was removed by a wig-wag signal from her captain, "Jack" Philip: "Luck of H, struck bottom in eight fathoms." "H" was the call letter of the *Texas;* but the concensus of opinion was that it was left optional as to whether it was intended to signify Hell, Texas, or Hoodoo.

That seemed enough for one day. But it only *seemed so.* On the afternoon of the same day, as the squadron was entering through the southeast channel, the *Iowa* was seen to be in difficulties and soon she signaled that she was aground. The *New York* stood by and got some lines out to her, and by one o'clock that night she got off. None of the foul ground on which the *Iowa* and the *Texas* had struck was indicated on the charts, so that no blame attached to any one. I was appointed senior member of a board to examine the hulls of both ships to determine the extent of injury as far as was possible from inside, there being no docking facilities; and I passed some rather disagreeable half-hours. Being of somewhat slighter build than the other members, it naturally came to me to squirm into and around places under the turrets that seemed not much too big for a cat. There certainly was a great deal of local damage done, though, as the inner skins were tight, no water was making its way into the hulls proper.

Being actually confronted with possible war, co-ördinated defense exercises of every kind were car-

ried on vigorously during the stay at the Tortugas. Very soon after our arrival, the attention of our gun-division officers was attracted to Loggerhead Key, and the possibility of holding small-arms target practice there was suggested. There was not a moment to be lost. I rushed a boat with an officer to the Key to preëmpt it; and every morning that we remained at anchor, one division or another pulled and sailed itself to it in the sailing launches, and passed the day in target practice. As a result we had to change the gun pointers at nearly all the guns of the secondary battery, thereby vastly improving its efficiency.

While we were at the Tortugas the news came of the destruction of the *Maine* in Havana harbor. After that there did not seem to be much probability of war being avoided, though I felt confident then, as I have been ever since that, although there was found abundant and irrefutable proof that the disaster was caused by an external explosion, there was no connivance at it on the part of the Spanish Government. I was especially interested in the incident because the Executive of the *Maine* was Lieutenant Commander Richard Wainwright, my brother-in-law. He was subsequently detached from her and commanded the converted yacht *Gloucester* during the war, winning his laurels off Santiago when the Spanish fleet came out.

During the passing of those months of early spring questions of strategy came under consideration in Washington leading to the reorganization of the fleet, and to the bringing of the ships in Key West waters north for the formation of new units and for urgent repairs while there was yet time. On March 22 we left the Tortugas for Newport News, Virginia,

arriving there on March 27 and immediately engaging the facilities of that shipyard. But even there we had to suffer from the lack of coördination of elements of naval defense; there were no docking facilities, and we had to resort to our seaman gunners, who were trained divers, to scrape the ship's bottom. We were able to supplement them by divers from the shipyard. No doubt they did manage to scrape off some of the accumulation of seaweed and barnacles that greatly reduced our speed; but that is a makeshift of restricted value apart from the result of leaving the steel plating scraped bare and exposed to rust and speedy refouling. No more convincing argument than that situation could be found against the adoption of a plan to concentrate all repair facilities in one immense naval base. The shipyard's boilermakers also were needed to improve the condition of the boilers which were all the more in need of repairs as the result of our own boilermakers having been taken away to attend to the *Indiana*.

Commodore W. S. Schley hoisted his broad pennant at the masthead of the *Brooklyn* on March 28, as Commander in Chief of the Flying Squadron. On that same day all ships began painting the hulls, upperworks and masts gray—a most significant operation. All of April and until May 13 were passed in those waters, with a coal barge alongside from which we would draw the daily requirements in order to have the bunkers always full in case of sudden orders. Subcaliber practice with the guns was also unremittingly carried on.

At last, on May 13, the Flying Squadron put to sea and stood south. A stop was made off Charleston for orders, which were brought off by the light-

house tender *Wistaria,* as also the news that the Spanish fleet had been sighted off Curaçao. At Key West we met the *New York,* flying the flag of Rear Admiral William T. Sampson who had been given the acting appointment and command when ill health had compelled the detachment of Rear Admiral Sicard.

The appointment of Admiral Sampson to the chief command was one that met with very general approval throughout the service, particularly among those whom he was to command, it being anticipated that his handling of the naval forces would be characterized by skill and vigor. It is needless to recall how well those anticipations were realized. While he was of a quiet, seemingly unsympathetic presence personally, his name had always been associated with advances in the line of his profession. He had always been at the forefront, and was instinctively recognized as a leader. In the "piping times of peace" such were of necessity the only attributes upon which judgment could be formed as to war capacity, the possession of nerve and unflinching courage being, of course, not surely known until tested.

We learned also from the *New York* that the *Oregon,* "of Oregon fame," had completed her record-breaking voyage from the Pacific and arrived at Barbadoes. Captain Clark had achieved his fame, and it only remained for him to sustain it off Santiago. Chief Engineer R. W. Milligan of that ship also came in for his due share of acclaim for the splendid ability with which he seconded his captain in that and subsequent fine work.

On May 19 we put to sea from Key West—the *Brooklyn,* the *Texas,* and the Massachusetts, with two converted yachts, the *Scorpion* and the *Eagle.*

The *Iowa,* a battleship of more recent design than the *Massachusetts* class and one thousand tons larger, joined us a couple of days later, making a compact little force far superior to what the Spaniards were known to be sending over. Rounding Cape San Antonio, the western end of Cuba, we reached the offing of Cienfuegos on May 22, and remained there two days, blockading, as there was a report that Admiral Cervera's ships were there. Then an order was received from Admiral Sampson for the squadron to proceed to Santiago, as the Spanish ships had been located there, and at seven o'clock on the evening of May 24 we proceeded in that direction, leaving the gunboat *Castine* to watch Cienfuegos. But our progress was a disappointment to all who had expected a rush that we might surely bag that fleet. We moved comfortably along during the night, and early next morning slowed down to wait for the yacht *Eagle* which could not keep up in the moderate sea that was running. Virtually to halt the entire squadron in the chase after our one objective, the enemy's fleet, out of solicitude for a small, auxiliary gunboat which was in no particular danger did seem curious.

But yet a bigger surprise was in store. Toward evening on May 26 we arrived at a position about twenty miles off the entrance to the harbor of Santiago. High land was visible which seemed to conform to the profile of that vicinity, and it was supposed that in the morning at the latest we would close in on the harbor mouth. A couple of hours after arriving there the *Brooklyn* signaled to the squadron that the destination was Key West *via* south side of Cuba and Yucatan channel, at a speed of nine knots. This naturally caused great astonish-

ment. At twenty minutes after nine that evening we started westward, away from Santiago and the Spanish fleet. We ran all that night, having the large, fast auxiliary cruiser *St. Paul* and the *Minneapolis* and the *Marblehead* on the left flank, and the auxiliary cruiser *Yale,* with the collier *Merrimac* in tow, and the converted yacht *Vixen,* on the right, or inshore, flank. The next day we stopped and drifted about, the *Yale* having some difficulty with her tow, and the *Brooklyn* signaled the general inquiry, "Can you fetch Key West with remaining coal?" The answers all seemed to be in the affirmative. In the afternoon we started ahead again on a west course, and at seven we stopped again and lay-to all night. During those stops several vessels coaled from the *Merrimac.*

At one o'clock on the next day, May 28, the squadron started eastward, at six knots' speed, and signal was received from the *Brooklyn,* "While off Santiago a general meeting place will be twenty-five miles south of that place." At half-past seven we stopped and lay-to during the night, being about ten miles south of the entrance. On the following morning the works at the entrance to Santiago were in sight and we made out what seemed to be a couple of vessels in the entrance. After steaming in to about six miles we recognized the *Cristobal Colon* moored head and stern at the inner end with her broadside bearing seaward. All that night and the next night the squadron countermarched back and forth in front of the entrance, with the gunboat *Marblehead* and the *Vixen* patroling closer in. In the meantime, other vessels joined.

We were not long in learning the explanation of the strange movements of May 26 to May 28. Com-

modore Schley cabled to the Navy Department on May 28 that rough weather prevented coaling the ships and that, after striving earnestly, he was forced to proceed to Key West for coal by way of the Yucatan passage. The Department sent cable messages to various points to get word to him to continue at Santiago and notified Admiral Sampson, who was also asked how long he could blockade, to which he replied, "indefinitely."

A little before noon on May 31 Commodore Schley came on board the *Massachusetts,* with his flag lieutenant. I happened to be on the quarter-deck at the time, and joined the Captain at the gangway to receive the Commodore who said, "I am going to take you and the *Iowa* and the *New Orleans* in there and sink that ship. Sampson will be here to-morrow and I want to get that done before he arrives. We'll go by slowly and fire deliberately in order to sink her where she lies." I pointed out that it was not very far from the men's dinner hour, and that if we were to go in at once the galley fires would have to be put out, and I suggested that the men be allowed to get their dinner and the officers their luncheon, and then we could clear ship and go in. That suggestion was acted on.

After busying myself over certain details I went down to the wardroom and found the mess in an uproar. Upon asking the cause I was told that the flag lieutenant had announced that the range was to be nine thousand yards and the speed ten knots. With the guns of that early period of our ordnance renaissance, a range of nine thousand yards seemed almost prohibitive, so much so that the officers were incredulous and inclined to laugh at the thought. But that was the order. As for the speed of ten

knots: the outer part of the entrance to the bay of Santiago is narrow and rather long, with a high coast on each side, so that a vessel lying at the inner end, where the *Cristobal Colon* was, could be seen from only a small sector of the offing, and vessels steaming by at the rate of ten knots, even at a distance of nine thousand yards, would hold her in view only a very short time.

At half-past one the *Massachusetts* led in, followed by the *New Orleans* (an English-built, unarmored cruiser of three thousand two hundred tons, carrying Armstrong 6-inch R. F. guns), and the *Iowa*. Being westward of the entrance, out of sight of the *Colon,* we stood in toward the shore until the navigator, Lieutenant T. M. Potts, estimated the distance to be as directed, when we changed course to the right and headed east for across the entrance. There were no very well-known objects from the heights or bearings of which he could measure the distance accurately, and, by not making any allowance for the "advance" that a ship makes in turning through a right angle, it was perhaps hoped to err a little on the side of closer range. But the first shots, with the sight bars at eight thousand, five hundred yards, fell short; and in the approximately four minutes that the enemy was in sight there was scant time to reload with the cumbersome gear of that day. When we had passed beyond and the *Colon* was screened by the high shore of the entrance, the captain came to where I was standing on the forward turret in convenient position for speaking either to the division officer in the sighting hood of that turret or to the people in the conning tower through the sight slits, and said, "The Commodore says to go round with port helm and run by again."

Turning with port helm threw us off shore, increasing the range by about four hundred yards.

We turned and made another run, heading westward, and fired a few more futile shots, after which we hauled off. Our total time of firing was seven minutes and thirty-five seconds.

On the next morning Admiral Sampson arrived in the flagship *New York,* having the *Oregon* in company, to which ship we gave three hearty cheers at the first opportunity. Plans had evidently been matured previous to arrival, as, in the forenoon watch, signal was made asking for volunteers to take the broken-down collier *Merrimac* in and sink her in the entrance to block it. Before any one had a chance to make application, however, another signal announced that the opportunity was extended only to enlisted men as the officer had been chosen. At the same time, as the *Merrimac* was alongside the *Massachusetts,* we were directed to strip her of every useful thing, as she was to be sunk. In the meantime, it was observed that the *Cristobal Colon* had been withdrawn past the sharp bend at the inner end of the entrance and was no longer in sight.

On June 2, the day after Admiral Sampson's arrival, the fleet was divided into two squadrons: the *New York,* the *Iowa,* the *Oregon,* and the *New Orleans* forming the first; and the *Brooklyn,* the *Massachusetts,* the *Texas,* and the *Marblehead,* the second; and blockading stations were assigned so that the fleet formed a semicircle about the *Morro* as a center, the first squadron taking the eastern quadrant and the second, the western.

At about three o'clock on the morning of June 3, Naval Constructor R. P. Hobson, U. S. N., performed the daring exploit of taking the *Merrimac* into the

entrance and sinking her there for the purpose of blocking the channel. While the object was not completely attained it made it much more difficult for the enemy to get out if so disposed. It seemed curious that a naval constructor should have been allowed to do that when there were certainly plenty of line officers present who would have volunteered had they been allowed and whose business it would more properly have been. But he maintained that he had conceived the plan and worked out the arrangements in every detail, and claimed the honor. As he was a graduate of the Naval Academy, and sufficiently familiar with the handling of ships, and was thought to have perfect courage and coolness, the admission of his claim was probably just. They went in under a heavy fire, but none were wounded, strange to say. They drifted in and up to the Spanish ships on a raft, after scuttling their own ship, thereby being lucky enough to be captured by the Navy instead of the somewhat irregular Army. That fine old seaman, Admiral Cervera, sent out a flag of truce without delay to say that they were all well and would be held as prisoners of war until exchanged, that it was a gallant deed well done, and that the entrance to Santiago had always been difficult but was more so now.

On the afternoon of June 4 the *Texas,* the *Massachusetts,* the *Iowa* and the *Oregon* were sent in toward the entrance and took positions at four thousand yards from the forts to observe what was being done in the way of strengthening them. No shots were fired from either ships or shore, and at twenty minutes after five, in obedience to signal, they resumed blockading stations at about seven thousand yards. Several torpedo boats, among other small

craft, were observed in the harbor near the *Merrimac;* as they had three smoke pipes they were presumably fairly new and efficient craft.

On June 6 an attack was made on the forts. At a quarter after six the two squadrons stood in, each in single column, and circled, the first squadron engaging the eastern batteries and the second, the western. Fire was opened at about five thousand yards, the shore batteries replying vigorously; the second squadron then circled and took position at four thousand yards' range. After another turn the *Massachusetts* and the *Texas* took position at three thousand two hundred yards, and, besides the big guns, the *Massachusetts* poured in a few salvos from the secondary battery. A few minutes later a fire broke out in the Socapa battery, on the western side, and its guns ceased firing. The *Massachusetts* continued the engagement until a quarter after ten, when, in obedience to signal, she resumed station in the blockading line. There were no casualties; what few hits there were being, strangely enough, aloft; the Spanish artillerists were not only not expert but apparently subdued by our heavy fire.

Upon several occasions during the month similar bombardments were carried on; they seemed so one-sided that toward the end the men got to calling them target practices. Not only was the Spanish gunnery wretched, but their ordnance material was poor. I picked up a fragment of a shell that had struck the forward turret, and found it to be the rottenest kind of porous cast-iron. Those bombardments, however, were useful both in material and moral effects.

As the sinking of the *Merrimac* had not entirely closed the entrance, and as in any event there were torpedo boats within that could certainly work their

way out, Admiral Sampson resorted to the bold expedient of having the heavy ships maintain a searchlight watch on the entrance throughout the night, taking stations sufficiently close-in to illumine the channel effectively. This was begun on the night of June 8; one heavy ship would take station at dusk, at generally about two thousand yards from the entrance, turn on her searchlights and remain there two hours, another ship acting as a support a thousand yards or so farther out; then the supporting ship would relieve the watching ship and maintain the searchlight illumination for two hours; and so on until daylight. The whole blockading line was also ordered by signal to "Close in to three miles at dark."

Another occasional feature of that period was the dropping of high-explosive shell from the *Vesuvius*, which was under the command of Lieutenant Commander Pillsbury. Most of her projectiles exploded, with terrific detonation, and one morning there were evidences of damage done to the vicinity of the eastern batteries. It is probable that the shells that were not heard to explode had fallen in the bay beyond the turn, and the muffled sound had not reached us. She labored under the severe handicap of having nothing to aim at, nor anything to help estimate her bearing or distance from any fort; everything on shore was in absolute darkness, and the fleet made no attempt to illumine any object. Once when she was about to try to get in position while the *Massachusetts* was on searchlight watch, the captain discussed with me the advisability of turning our searchlights for brief spaces on the Estrella battery in order to be of possible assistance; but it was decided that to do so would not be in keeping with the orders to keep the channel

uninterruptedly illumined. So the *Vesuvius* had to fire blindly. But the enemy were equally blind; one night, hearing the ripping blast of the air discharge followed by the fierce detonation of the shell, they fired a few shots at random, one passing close over us, although we were not in the direction of the *Vesuvius*.

On June 20 a number of transports, escorted by the *Indiana* were sighted. The flagship signaled to the fleet an inquiry as to how many boats could be had for landing the army. Our reply was "Two steamers, two launches and four cutters," which was considerably in excess of what other ships could do. When stripping ships of everything that could be spared before proceeding south from Hampton Roads, there was a strong, general opinion that boats should be reduced to a minimum because of the danger of fire or *débris* in action. The *Massachusetts* thought differently, our view being that if a close or decisive action were imminent it would take only a moment to drop the boats overboard and abandon them, and until that time they might very possibly be of great use. That situation is just what developed; we were able to do more than any other ship in landing not only the troops but the continuous supply of stores afterwards; but it was at quite a cost to ourselves, as it took seventy men out of our battery and also from the almost daily work of coaling. We did not get them back for weeks. After the army had been landed, the stream of supplies had to be kept up, and the Quartermaster of the expeditionary force, in reply to the suggestion that the boats and men be returned, said emphatically, "Take those boats away and the Army falls back."

Pending the final decision as to where to disem-

bark the army, several feints were made to "keep the enemy guessing" and to develop resistance at different points. The converted yachts, the *Vixen,* the *Gloucester,* the *Eagle,* and others were frequently engaged attacking troops on shore, blockhouses, field batteries, etc.; and sometimes attacking and, after the army was landed, defending trestle bridges. In one serious feint, some three miles west of the harbor entrance, the resistance that was developed required the *Texas* to go and shell the place, which she did at close range. While this was going on, on June 22, the army was being landed some fifteeen miles to the eastward.

The Spaniards had also mounted some heavy guns on Punta Gorda, a high bluff back of the inner end of the entrance, with which they could fire on vessels that were not visible from the lower batteries.

The last attack on the forts was made on July 2. At a quarter to six the squadron stood in in the usual formation, and the *Massachusetts* engaged the west battery and Punta Gorda until twenty-five minutes to eight, being at two thousand two hundred yards from the former. That night our searchlight watch was from half-past one to half-past three, and upon being relieved we proceeded eastward to Guantanamo, going right alongside of a collier to get a good fill.

That was on July 3; and at five minutes to two of the same day, we received a signal from the *Marblehead,* which was in charge of the Telegraph and Cable Station: "Spanish fleet is outside Santiago." Buckets, bags, baskets, shovels, everything were dropped, lines were cast off, and we backed away from the collier; but it was too late. The Spanish ships, upon issuing from the harbor, had headed west-

ward; and soon they were all driven on the beach by our ships under Admiral Sampson's battle order to charge right at them when they should come out. Then we crept back alongside the collier. Through all those weeks of searchlight watch and daily coaling, the *Massachusetts* alone had taken no opportunity to have a day of harbor coaling and a night off until this one time, the order for which had been received only six hours before.

The next afternoon we returned to the fleet, and took our searchlight watch as usual with the *Texas* as supporting ship. We did not think of there being anything left in the harbor, and were, therefore, surprised to see a gray bow emerge from behind the bend beyond the entrance into our searchlight beam. We quickly opened fire as did the *Texas*. The officer of the forward 13-inch turret, Lieutenant J. H. Glennon, called to me, as I was at my usual station on the turret roof close to his sighting hood, that through his telescope sight he could not make things out very well and could not surely distinguish between that ship and the Estrella battery in the beam of the searchlight. It happened that, without any particular eventuality in view, I had had a narrow white stripe painted on the turret roof exactly parallel to the axes of the guns. Calling to him to keep his elevation right and to train slowly, I lay down and squinted along that stripe, resting only on my finger tips and toes, and called "Right on" at the proper moment. The gun was fired simultaneously, and we had at least the satisfaction of seeing a very evident hit and the flying débris. But what was it all for! Captain Philip signaled from the Texas, "Going to quit. I believe he wants us to help sink her." And

that was about it, except that our interference prevented their sinking the ship where they wanted to. It was the *Reina Mercedes,* which they sank to try to keep us out, just as we had sunk the *Merrimac* to try to keep them in, and with no greater success. One further result of that incident, of personal importance to me, was that the discharge of a neighboring 8-inch gun completed the wrecking of my right ear which had already been injured during other bombardments.

That ended the war. On July 14 the *New York* signaled that the Spanish army had surrendered; and there was some talk of a protocol. But, of course, prodding would have to be kept up to insure serious talk of peace. To that end General Miles organized an expedition to proceed from Guantanamo to Puerto Rico, and the *Massachusetts* was detailed to act as escort. On July 21 the armada proceeded. It was given out that we were going to a certain point on the northern shore of the island; but one night, when we were well on the way and clear of any possible spy, the course was abruptly changed to pass between the islands of Santo Domingo and Puerto Rico, and at twenty minutes after eight on July 25 we appeared off the little harbor of Guanica in the southwestern corner of Puerto Rico. The *Massachusetts* could not go in, but the *Gloucester* could and did, intending to land what men they could and to prevent word being sent out of our arrival. A transport soon came along, following the *Gloucester* after we anchored, and as it approached I realized that without our boats they might be handicapped in giving any support to the *Gloucester's* little landing party of blue jackets. Another instance of the ad-

visability of holding on to boats as long as possible! I thought my brother-in-law was entitled to my best efforts. Therefore, when the captain said to get boats out they were gotten out in very quick time, and, as the transport passed, our steamer, towing a big sailing launch and four cutters, tailed in immediately astern of her and they were alongside before she anchored. As I afterwards learned, the transports had landing equipment of their own, but our boats with their skilled crews and cracker-jack midshipmen in charge were very handy.

Looking in through the entrance, that little bay seemed one of the prettiest spots imaginable; there were waving palms, and trees and flowers, and bright-looking tropical houses. Above all, the trees seemed to suggest fruits of different kinds—coconuts, mangoes, pineapples, oranges, all the things that we had been hankering after for weeks. Somehow we had never been able to get much of anything to eat after leaving Hampton Roads. I have never been so hungry as during those two months. The men, with their general mess, fared better, and we could get a few things from that mess, but it would not have done to ask for much. Even the week at Guantanamo, before proceeding to Puerto Rico, had not helped us out much. It was not until we got to Ponce that our cravings were satisfied.

Ponce was the strategic point at which General Miles was aiming; and, after two days off Guanica, we got under way at three o'clock in the morning, and proceeded there, arriving on the same day. There was no opposition, and the road was open to San Juan.

As our mission was ended, we returned to Guan-

tanamo on August 3, and on the next day proceeded to New York in company with the flagship *New York* (now known as the *Rochester*), the *Iowa,* the *Indiana,* the *Brooklyn,* and the *Oregon.* The *Texas* joined at Tompkinsville.

The reception accorded to us in New York harbor could not be surpassed in hearty, boisterous cordiality. Leaving Tompkinsville in the morning, on August 13, the fleet proceeded up the North River past Grant's Tomb, each vessel firing a national salute on passing it, and on up to One Hundred and Fifty-fifth Street where we countermarched and finally came to anchor off Tompkinsville. During all that time the waters of the bay and river were alive with craft of every description—yachts, tugs, ferryboats, sound and river steamers—all filled with enthusiastic crowds. It seemed almost a solid moving mass, fortunately all moving in the one direction with the fleet. Nor was the welcome confined to expressions afloat; many were the receptions and entertainments given in our honor in the city.

Then the fleet broke up, vessels going to various navy yards for overhauling. Our dear godmother State, Massachusetts, evinced a desire to express her sentiments toward us, so we went to Boston for a few days. Personally I was in a quandary then about the ship's appearance, having no paint on board and no time to obtain any by requisition. Finally I exhibited my own nerve by testing the nerve of the Executive Officer of the *Indiana,* Lieutenant Commander J. A. Rodgers of the class of '68; I signaled asking if he would lend me one thousand five hundred pounds of white lead, to which he replied that he might let me have one thousand pounds, but asked

REAR ADMIRAL WILLIAM T. SAMPSON

pointedly as to when I would return it. I satisfied him on that score, and I think we presented a very decent appearance on passing Nix Mate. The ships had all resumed their coats of white upon the conclusion of the war.

We did not enter Boston Harbor alone, but were followed by quite a bevy of smaller craft, gunboats that had done their full share in bringing the war to a victorious close—the *Detroit,* the *Machias,* the *Wilmington,* the *Helena,* the *Castine,* the *Marietta,* the *Bancroft* and the *Topeka.* Governor Roger Wolcott came on board off Boston Light and remained on board until after we had anchored in the harbor; and throughout our stay the ship was open to visitors and everything possible was done for their convenience. On the day after our arrival all the ships sent their landing parties on shore to form one compact parading force; and, marching at the head of the column, being in command of the *Massachusetts* battalion, I had occasion to feel exhilarated by the spontaneous cheering, which was accompanied by volleys of hand-clapping, though I discovered that shingles were substituted for hands and produced a most satisfying racket. We illuminated ship and worked the searchlights during one evening; and on September 7 we bade good-by to the friendly city and returned to the Navy Yard at New York, where the ship remained for some time.

On January 7, 1899, Admiral Sampson hauled down his flag on board the *New York,* and bade good-by to the fleet that honored him as the man who had ably ended the war at Santiago, as Admiral Dewey had begun it at Manila.

My association with the Massachusetts ended on

April 1, 1899, on which day I was detached and ordered to special duty in the Navy Department. At the same time, having been advanced three numbers and my promotion being due, I received my commission as a Commander.

## CHAPTER X

### GOVERNOR OF GUAM

Board to revise Navy Regulations—Appointed Governor of Guam—Down with fever—Navigating around a typhoon—Island of Guam—Inhabitants—Administration—Finances — Murder trial — Hurricane — Expedition about the Island—Earthquake—Witness before Schley Court of Inquiry—Farewell to the Island.

After the close of the Spanish War it was decided to revise the United States Navy Regulations, and a Board was appointed for the purpose in the spring of 1899. Upon my detachment from the *Massachusetts* I was ordered to duty as a member of it. It took a year to complete that work.

The time was then approaching to send out an officer to relieve the Governor of Guam who had been there about a year, which was as long a time as was then thought expedient to keep one in such secluded and apparently trying exile. It so happened that at a dinner in the house of a friend, where the Secretary of the Navy was also a guest, I made some remark about the pleasure of foreign service as compared with unvaried service on our own coast, which the Secretary overheard. It prompted him to detain me in the smoking room when the others went to join the ladies, where we talked about Guam, and he asked if I meant that I would like to go there. I assured him that I would, and after a short talk he said he would send me but could not tell exactly when,

and directed me to let him know if any other orders were issued to me.

There was no great delay, and in April, 1900, just as the work on the Navy Regulations was completed, I received my orders. This gave me great satisfaction, especially as my wife announced her determination to follow me with the children as soon as I could get out there and send back word to come. I was not at all certain that the climate and conditions were such as to make it advisable to take children there, so that decision had to be deferred until I should have an opportunity to form some opinion. The Secretary's parting words when I paid my respects to him upon leaving were that a good deal more typhoid fever had been reported than he would like, but that he hoped that would be abated. The disease proved not to be typhoid but a variety of Malta fever, of which there was quite a little but not many deaths.

I did not reach the island until July, 1900. The auxiliary cruiser *Yosemite,* the station ship at Guam, met me at Yokohama. From there we went down to Manila for coal and stores, intending to push right on from there without delay. But the Boxer troubles in Peking supervened and the "Senior Officer Present" at Cavite ordered me to remain there and to be prepared to tow or escort the monitor *Monadnock* to Taku. But the troubles did not call for that ship, and after a few weeks I was directed to "proceed on duty assigned."

My introduction to the new duty was not encouraging. We passed out from the Philippine group through the San Bernardino Channel and shaped the course eastward. A feverish feeling that had been attracting my attention for some time now became so marked that I had to send for the medical officer

who found that I had a high fever and insisted on my "turning in." This I did; but the fever kept me wide awake, and at eleven that evening I became conscious of a peculiar motion of the ship, not readily noticed except in the quiet and solitude of my cabin. So impressed did I become with the motion that I sent to the Navigator for the height and movement of the barometer, the direction and force of the wind, and the appearance of the sky. From his report I quickly decided that, steering E. ½ N., we were heading straight for a typhoon advancing from E. S. E. There is no use in driving through a typhoon when it can be avoided; no time would be gained and much damage would surely be sustained. So I had the course changed to S. ½ E. and ran for eight hours, after which I headed up on the old course tentatively; but soon the barometer began to fall and the sea to rise, so we headed off to S. ½ E. again, and ran on that course for some time. The typhoons in that part of the world generally come from a breeding ground a few hundred miles southeastward of Guam, and pass at varying distances from that island toward the Philippines. At first their diameter is not great, and I thought we might be able to skirt the southern edge; and that is what we did. Lying in my bunk, I navigated the ship around that storm until we finally sighted Guam in fine weather. By that time, however, I was a very sick man and had to go on the sick list and turn the command over to the Executive. I was so weak that the doctor was quite concerned, as I learned afterwards. But in a day or two I began to mend, and it was astonishing how rapidly I recovered after I could leave the ship and get on the beach. As soon as possible I relieved the outgoing pioneer governor, Captain R. P. Leary, and

placed the *Yosemite* at his disposal to take him to Manila or Yokohama, as he might prefer. And without any serious hesitation, despite my discouraging initiation, I wrote home for the family to come out.

Then I tackled my problems, encouraged by a feeling of prepossession with my surroundings. The island is a charming little spot isolated amid all that wide waste of waters, possessing great though mute attractions in the way of pretty scenery, a people mostly animated by good instincts, and conditions of life possessing the charm of novelty for those whose sphere leads them only through countries of familiar aspect and customs. Of an area of a little over two hundred square miles, and with a very diversified surface, it presents a varied field for the pedestrian or cavalier. The highest summit, Jamullong Manglo, rises some one thousand three hundred feet above the sea, and there are many peaks of a lesser altitude with deep valleys and irregular spurs between. I came to know it all very well by numerous "hikes" at different times.

Creature comforts were few at first for the newcomers. But in the course of a few months a refrigerating plant and cold-storage room which I had brought out were erected and put in operation; and in time, by the kindly coöperation of the War Department, the monthly army transports stopped there on their outward voyage to Manila bringing mail and fresh meats and whatever any one might have ordered from firms in San Francisco. These transports could touch there only when going westward to Manila, as their homeward voyage was necessarily up the Chinese and Japanese waters, taking then the great-circle route across. As three months were required to obtain answers to letters

or responses to orders for groceries, it was necessary to cast well ahead in all matters.

The station ship was the sole reliance for emergencies; and some trepidation was felt, especially at first, when sending her away on some necessary mission, because on leaving the Island she would enter the bailiwick of various "Senior Officers Present" who might, and on one occasion nearly did, succeed in diverting her from her legitimate duty. As a matter of fact, upon the first special occasion I detached the chief engineer, the paymaster and one watch officer, holding them as quasi hostages for the return of the ship. There was no telegraph cable (nor wireless) to the Island then, yet, such is the perversity of human nature, that most of the little colony of that period, reminiscing afterwards, have seemed to agree that they would not care to go back there in its present advanced condition—telegraph cable, waterworks, electric light and what not. In those pioneer days there was an undoubted charm, not wholly explicable, and perhaps not entirely appreciated by all, but which must have emanated from the general atmosphere of cheerful determination to laugh at hardships and to enjoy all that there was to enjoy. This, together with the active life, the interest in the people and work in their behalf, and the occasionally thrilling sense of isolation and self-dependence, made the experience there a pleasant one.

In those early days of our tropical shore service medical advice was quite insistent upon abstinence from exposure to the sun to as great a degree as possible. But it was soon borne in upon me that that, like everything else, can easily be carried to an extreme, and that an important aid to health and fitness lies in not unduly changing one's mode of life but,

if accustomed to activity, to utilize the natural advantages offered for open-air exercise, at the same time living rationally according to one's habits. A sprint or a ride now and then, varied by occasional long hikes, preserved in good health all who took part, their ruddy look contrasting noticeably with the tropical pallor of those who remained mostly indoors.

With the exception of a little victoria which had been bought for the use of the Governor's family, and, later on, an ambulance drawn by mules for daily communication between Agaña, the capital, and Asan, and the port, Piti, the only means of transport about the island were rude bull-carts and pack animals. One of the two superb, white, stallion ponies that drew the victoria was a fine saddle horse, and I would often give him the joy of a gallop along the neighboring beaches, or a ramble over the rough roads. On other afternoons, starting out a couple of hours before sunset, a brisk tramp on foot over hills and plains proved an excellent tonic. Not infrequently, in company with the energetic young *Jefe de Obras Públicas,* Civil Engineer L. M. Cox, U. S. N., a hike would be lengthened to cover an entire day, or two days, while he was engaged in surveying or kindred work. Those tramps offered just enough hardship to be thoroughly enjoyable; not only are the principal summits so steep that it is a scramble to get up them, but the peculiar formation of intermediate peaks and hogback ridges often doubles the amount of climbing. Those climbs would alternate with trudging over hot sand beaches or through jungles or swamps. After plowing through an area of oozy mud, and crawling under or climbing over fallen trees, our way would sometimes lie in tall, dry blade

grass, through which we would butt our way with arms crossed in front to protect the face from the sharp, cutting edges, or else we would turn and back through. Not infrequently a heavy rain squall drenched us completely; but that would in turn be corrected by an hour of hot sunshine. All thought of bothering with rubber coats was abandoned early. Parts of long journeys would be done on bull- or cow-back, those sure-footed beasts being excellent mounts in swamps or on steep slopes. The ordinary bull furnished fairly comfortable riding; but the breadth of beam of the carabao made riding astride a painful exercise at first. Most of the marching, however, was done on foot.

What with the almost daily walks by myself, and the extended expeditions with the *Jefe* and others, during my two years and a half I tramped many hundreds of miles—over a thousand altogether; and I was all the better for it. Incidentally, I developed a fondness for walking which remained with me and stood me in good stead in later years, especially when I was retired and had to manufacture activities.

In the matter of housing, much the greater comfort surrounded the members of my family, who came out and passed nearly two years there; because Government House, locally called The Palace, afforded conveniences for sleeping, bathing and eating unfortunately not available to the other officers and their families. The Palace, which had been built some thirteen years before by a Spanish governor, was large and airy (not a window sash in it) with walls three feet thick of coral masonry, protected on all sides from the sun by inclosed verandas. In the course of time a corrugated iron roof, with guttering and spouting, replaced the old one of tiles, the latter

being infinitely more attractive-looking but less adapted to catching and collecting rain for use in bathtubs transferred from one of the station ships. The living quarters occupied the entire second story, the ground floor containing various offices, courtrooms, etc.

The worst feature of that Government House was its situation on the extreme inner edge of the low, level plain on which the capital was built. Although fronting the shore, that plain, being closely backed by high hills which banked the wind, was the least salubrious and most debilitating place on the island. As a result, two of our children became quite ill of fever not long after their arrival, and the surgeon declared it absolutely necessary that they should have a change of air. The only feasible change was to move down to Piti, on the bay of San Luis d'Apra, where there was at least unobstructed movement of air; so we moved. It was an anxious time, and it was a dejected party that wended its way down the road in the blazing sun. The two little girls were carried down and loaded into the ambulance; then came the family in the little victoria and other ruder vehicles; and I brought up the rear on my saddle horse. We obtained possession of a frame building that had been used by a surveying party headed by Admiral Merry, I also bought two large hospital tents, and we camped out right at the water's edge. The children picked up slowly, but we remained there several weeks, enjoying it after our anxieties were relieved. I rode each morning up to Agaña, a distance of about five miles, and back in the evening; and the horse seemed to enjoy those rides as much as I.

In spite of that illness of our children, we had to admit that, during the time the family was there,

there was less occasion to seek medical advice and remedies than during an equal period at home. Being in latitude 13 degrees 30 minutes North, it is always warm, even hot, but never so excessively hot as in our American cities paved with asphalt. While the rainfall is very considerable, a whole rainy day, such as we know at home, is exceedingly rare. A heavy shower will come up and drench everything for half an hour or an hour, or, in the rainy season, several hours; but it never drizzles. When the downpour ceases the sun comes out bright and hot. The rainy season is during the summer months. During the midwinter months it rains, but the showers are not so long nor so heavy as in August, September, and October. The feature of the climate that is trying to Anglo-Saxons is its equableness, which is due to its situation as a small dot in a vast expanse of water; there are only a few degrees of difference of temperature between winter and summer and not many more between night and day. It is this sameness through successive seasons that tells upon Americans. The natives consider the wet season to be the healthier; and it is a fact that while the less wet season, especially January, is the more pleasant, the rains were always looked forward to.

The men had very nice barracks, and everything possible was done to enhance their comfort and to stimulate them in the search for rational pastimes. I should have liked to arrange for opening a saloon in Agaña for the sale of beer and light wines; but no one would take out a license without promise of federal supervision and protection, and that was not feasible for several reasons, one of which was that a cardinal feature in the administration of the Island was its separation from the Naval Station and the

confinement to the latter of all federal military authority. It was a pity that it could not be done; the existence of such a saloon carefully restricted in its sales would have been a rational element of comfort such as existed at home, and would probably have eliminated the occasional slight troubles due to *tuba,* a very demoralizing, native, strong drink produced from the sap of the coconut tree.

The most interesting subject of study in visiting new lands is the human and social side; and Guam was no exception to this rule. There was at first, and there may possibly still be, some misapprehension in regard to that people, due largely to a tendency in passing visitors to depict strange scenes in a way to enhance the interest of their personal experiences rather than to convey a truthful exposition. Apparently animated by this peculiar desire, American men (and women) stopping for a few hours on their way to Manila, would rush out with their kodaks to a certain little Caroline village and gaze upon that small colony of naked savages. This perhaps was not to be wondered at, as it was a really novel sight; but unfortunately letters and magazine articles would be sent home illustrated by photographs which virtually ignored the real people of the Island. As a matter of fact, when the Island came to us, in a population of a little over ten thousand (according to a census taken in 1901), there were less than one hundred blacks from the Caroline Islands, the remains of some six hundred creatures who had been brought there some forty years before on a labor contract and who had never been returned to their home islands. Collected in a *barrio,* about a mile from the capital, they eked out a precarious existence from mother earth, gradually dwindling in

numbers, a living exposition of what low orders of life are still to be found in the human family. An effort was made to compel them to wear clothing; but it became recognized that that would only hasten their complete extinction through the agency of pneumonia and consumption, so the idea was abandoned, and in 1901 it was decided to deport them. They were all sent to the neighboring island of Saypan, about one hundred and twenty miles away. It was feared that they would not be welcomed there; but the German governor accepted them gladly, putting them to compulsory work—a recourse incompatible with our institutions.

The real people of the Island, the Chamorros, are of an entirely different race and stage of development. Naturally they were glad to be rid of those unlovely savages with whom people might associate them in their minds. Just as they also have felt resentful over the term *Ladrones* still applied to those islands in some geographies, because this name was first applied to the whole group by the explorer Magellan who seems to have suffered from petty thefts committed on board his ships by the astonished, swarming natives.

Of original Malay stock, but with a strong injection of Spanish blood, the Islanders were found to have somewhat the vices that are apt to be inherent in communities inhabiting isolated spots and without encouragement to attain to the standards of civilization and morality that rule in the more enlightened parts of the world. In the recent past also they had had certain unworthy preceptors whose removal was tacitly admitted to be of beneficial effect. It is possible that the laxities observed were simply more open, rather than more general, than in more highly

favored communities. However that may be, under the new dispensation a beneficent leaven which may be working still was at hand. But in 1900 all who had opportunity to get at the inner man credited the Chamorro with being in many ways an attractive person—honest, tractable, peaceable, and tending to emulate that which is good rather than to follow that which is bad. There was very little crime. The resident agent of a commercial company, who had seen life in many outlandish places, remarked that he had never been in a community where there was so little violation of law. Certain of their unwritten laws exhibit very correct notions, too. For instance, any one passing by another's property and feeling hungry or thirsty is entirely at liberty to climb a tree, knock down a coconut and eat and drink; but to pick up coconuts from the ground would be regarded as theft, as that would be done only to use the meat of the nut to make copra, a marketable article of export. Another attractive feature was an apparently innate dignity of demeanor that one is apt to find in peoples of Spanish origin or conquest.

The Chamorros are almost universally Roman Catholics, and very devout and happy in that faith. The venerable Padre Palomo, a veritable saint on earth, was the father of the flock and guided them with a sweet holiness that could not fail to impress all who came in touch with him. Antagonistic in creed but equally devout and single-minded in their sphere, were the little band of American Protestant missionaries who carried on their religious work under difficulties but with some success. Probably no material increase of happiness in either this world or the world to come attends a simple-minded man's conversion from Roman Catholicism to Protestan-

tism, or *vice versa;* but the opportunity to attend divine service was a boon to those who could not accept the former faith. Those devoted men and women, filled with a holy purpose, did much good by precept and example. And they and those who attended their humble meetings in one or another small native house showed to the Islanders, who had known but the one religion, that there is another religion, the followers of which, guided by its teachings, lead lives actuated by integrity and kindliness.

In appearance the people of Guam are attractive, with good physique, inured to (tropical) hardship, and possessed of singularly pure complexions which they probably owe to eating very little meat. (They are getting over that.) Their existence was not idyllic as may be fancied. Their wants were few, but since they were not easily met life was no easy struggle. A good deal really depended in each village upon the energy and intelligence of its *gobernadorcillo* (little governor or mayor). Merizo, for instance, was exceptionally well guided and was flourishing and contented under the fatherly rule of a mayor of marked vigor and capacity, Felix Roberto, while the improvident and anemic condition of a neighboring community became so marked as to require executive action. Possibly because of knowing no better, the temperament of the people was found to be cheerful and their general life one of placid content. Indeed, during the years 1900 to 1903, there was not infrequent occasion to admire the patience with which they met most trying conditions.

The principal occupation naturally is agriculture, and a very important and excellent feature in the social fabric is the pride and happiness in the possession of land, which results in the community being

composed of a large number of small landowners. The effect of this is, of course, to minimize the amount of labor that can be hired, with a direct consequence that large holdings are rare and that application of capital would be handicapped by dearth of labor. One ranchman would get his neighbors in for a few days to help cut his sugar cane or corn or to gather his rice or coffee, and would board and lodge them for the time; the next week he would be doing the same for his neighbors. But they were very haughty in the matter of accepting money; and it took infinite patience and tact on the part of the *Jefe de Obras Públicas,* or Public Works Officer, to explain the dignity of labor and to prevail upon men to work at so much a day to build roads, etc. While that trait seemed to offer something of a barrier to material productiveness, it was a very wholesome tendency which it is hoped will hold its own against outside influences. All proper means were employed to protect those small landowners against aggregations of capital and to facilitate their acquisition of title to lands, whether agricultural or pasture. There are some beautiful woods there too, such as the ifil, somewhat like mahogany. No encouragement was given to enterprises looking to any extensive destruction of those trees for export.

In promoting general health, the naval medical officers were the prime factor, and did excellent work, the senior surgeon being appointed Health Officer of the Island. An aversion to consulting them had to be overcome by kindly urging, supplemented by some Executive Orders; these related mostly to midwifery which was in so crude a state that the deaths were found to be in excess of the births. By the end of 1902 the proportions had been reversed. Some lep-

rosy was found to exist. A vigorous search brought about twenty-five cases to light; these were segregated in an extensive property on the shore at a convenient distance from the capital. In selecting this spot due regard was given to pleasant and healthy environment, and everything possible was done to encourage the inmates to activity, especially to engage in agriculture, chicken raising, etc., the products of their toil being bought from them for their own consumption, the proceeds going to their relatives outside.

The administration of the Island, small as it was, presented at first some vexatious problems. My predecessor, amid the difficulties attending so violent a change in governmental methods as that from Spanish to American, had attempted to correct certain abuses; but there had not been opportunity to undertake fundamental changes. One guiding principle to which I adhered steadily was the supremacy of the civil authority and the subordination of the military. A controlling object in this was to help win the islanders by bringing it home to them that they were now being governed not by a military autocracy but, in effect, by a civil administration. It may have been considered advisable to introduce some changes since the spring of 1903; but up to that time, at least, while the title of the governor was "Naval Governor," the administration was wholly civil in its methods. The limits of the Naval Station were definitely fixed, and outside of those limits there was no federal military authority. The marine detachment was present as a garrison for the Station, but beyond its limits officers and men of the Navy and Marine Corps were under the surveillance of the Island police, the *Artilleria Insular*. This was a

little company of native soldiers found there at the time of the American occupation and continued in existence as a police or constabulary. When called upon they did their duty in a way that reflected signal credit upon them in circumstances that might well have made them waver—an excellent and reliable body of men.

The work of restoring administrative order after the chaos of the interregnum taxed the resourcefulness and energy of the officers of the Naval Station who had to perform additional independent, civil functions; but success invariably attended their work, whether it was in rehabilitating the Island courts of justice and clearing a crowded docket, or caring for the sick and devising hygienic laws and examining lepers, or superintending public works and surveying and making plans for impounding and supplying water.

There soon came to be evinced a friendly feeling for the American government, its flag and its representatives. It is a little surprising that this did not take longer to develop because there was some reason for regarding the new rule as one imposing certain hardships. Under Spanish dominion 80 per cent of the cost of administering the Island was defrayed by the home government, the remaining 20 per cent constituting but a small amount which was raised almost insensibly. A bi-monthly, subsidized steamer service afforded communication with Yap, of the Caroline group, and Manila, giving opportunity to go and come, to export copra, and to import their little necessities. During the first year of our occupation nothing was done for those wards of ours. The entire cost of government had to be raised by taxation, and as the government transports, which

were such a great monthly convenience to the Naval Station, could not take private merchandise or passengers, the merchants were dependent upon the irregular visits of Japanese trading schooners, and they had to pay to them the exorbitant freight charges demanded by such a monopoly.

Furthermore, the expenses of the Island immediately increased greatly. A proper concern for its future welfare indicated three essential fields of governmental endeavor; instruction, especially in the English language which was bound in time to become of general as well as official use; good roads, to facilitate bringing copra (dried coconut meat) and other products to the one harbor, Piti; and a water supply for the capital, Agaña, and later, possibly, for the other villages. The leper hospital, also, had to be started and maintained. All this required money, and some hardship resulted. But the more intelligent persons seemed to grasp and soon to approve the methods. The *gobernadorcillo* of the thriving little town of Merizo, being questioned in a complaining way by one of his townspeople, replied in effect: "Don't you see the Governor does not send any of that money home? He spends it all for the Island, and most of it is given right back to us in payment for labor." And he was right; with the exception of the purchase of schoolbooks and, for a while, the salary of an American gentleman who came out with his wife and daughter to start English instruction in the schools, all the money was returned to the people in one way or another.

The principal sources of revenue were duties on imports, a small real estate tax, license fees, and a personal tax which could be paid in labor. During a couple of years one other peculiar asset was avail-

able, being none other than the sale of stamps. Of course, no great amount of postage was used, especially as all the official correspondence of the Naval Station was done in penalty envelopes; but the stamps, bought from the United States Post Office Department for the cost of printing and paper, had the name "Guam" overprinted on them, and as soon as that became known the philatellists became interested. One letter, received a couple of months after arrival, suggested faint possibilities, and much trouble was immediately taken to present the matter in most attractive form in every direction possible. As a fairly prompt result the mail one day included a letter containing five one-hundred-dollar bills with an order for assorted stamps. After that a flourishing business was done, until the establishment of a postal agency and the use of ordinary stamps. The road building profited by some twenty-odd thousand pesos obtained from that quaint source.

But the supply of money was precarious. After about a year the services of the American schoolteacher had to be dispensed with, and several times the Ship of State actually touched bottom. Upon one occasion the Treasurer of the Island appeared, in a state of considerable perturbation, exhibiting a bill of several hundred dollars for services rendered and exclaimed: *"No hay plata"* (There is no money). He was advised to pretend to be very busy and unable to attend to it for several days, during which respite it was expected that a certain Japanese schooner would arrive and furnish some import duties; and that did occur, a comparatively bountiful harvest being reaped in the nick of time.

After my return from the Island, in 1903, being on duty in Washington for a while, I was able to second

the efforts of my successors out there and managed to secure a small appropriation. Since then the needs of the place have come to be better understood, and the yearly appropriations have grown in a gratifying way, resulting in useful roads, water supply to several towns, and good schools. Possibly few know what difficulties were encountered (and overcome) during those first years without aid from home.

Whether or not the inevitable raising of the standard of living that always follows American occupation will make for increased individual happiness among those people is a question. But they did not seem to be antagonistic and appeared to appreciate that better days were opening before them. They were also shrewd enough to realize that the best opportunities will be open to those who acquire the English language. No difficulty was found, therefore, in obtaining attendance of children at the schools. Probably 80 per cent of the population understood Spanish, the remainder being still restricted to a dialect evidently based upon the original Chamorro but enriched by Spanish infusion. The following is a sample of the present dialect expressed phonetically by our alphabet: "*Ayo sija na caso anai guaja manafañetnot gui tataotao pat guaja rumeclama gui na manafañetnot, y cumequeja umadetiene hasta que y maquejajaye sina ma arresta ni y policia. . . .*" The meaning of this in English is: "In cases where bodily injuries have been received or claimed, the accuser will be detained until the accused can be arrested by the police. . . ."

In the administration of laws, apart from mere police surveillance, the old Roman law, as codified by Napoleon, of which one cannot speak in too high

praise, was restored in effect, slight modifications in details being cautiously introduced from time to time to bring about conditions in better harmony with American ideas. All legislation was necessarily by Executive Order; but no important law was thus enacted without first consulting men of different classes so as to see the matter from all viewpoints. In the lack of knowledge as to what competent material might exist among the islanders, it was deemed advisable to appoint an officer well versed in the Spanish language as Judge of the Court of First Instance in Agaña. Ensign A. W. Pressey was so appointed and held the office all the time that I was there and longer. For much the same reason I appointed myself to the Chief Justiceship of the Island. When personally exercising the functions of judge, I was entirely divested of all functions as governor.

Under this administration of justice an incident arose which, to the irreverent, may smack of the comic opera. A murder had been committed in Agaña before the American occupation and as soon as the Courts of First Instance had been rehabilitated, painstaking investigation by the energetic judge of that court in Agaña brought out the culprit. He was duly convicted of what corresponds to our murder in the first degree. Under the Roman law, as the act of murder had been committed "with circumstances of premeditation and treachery" (shooting in the dusk from behind a tree), the death penalty was mandatory. After a sleepless night passed in painful dwelling upon the repugnance of such a proceeding under American institutions, I confirmed the sentence but with the inward determination that in some way the execution should not be carried out except under such further judicial or executive ac-

tion as would comport with American practices. The constitutional requirement that such criminal cases shall be tried by a jury has at times been held to be nonexistent in newly acquired territory; but in a civil community enjoying a condition of peace and internal order such as existed in Guam, its members seemed entitled to the measure of safety springing from what I conceived to be the creative principle underlying that requirement, namely, that, when a jeopardized life hangs in the balance, the scale should not by swayed by the verdict of one humanly fallible judge. At the same time the necessity was recognized of carrying out existing law in letter and in spirit, and there was obtained from Manila a *garote*— probably the most humane instrument known for taking life.

The clerk of the court spread the conviction and sentence in the usual technical terms upon the pages of the case, following them with the customary formula by which under the law all capital cases were referred to the *Tribunal Supremo* of Madrid. There was the gleam of light—the loophole. The Chief Justice then addressed to the Governor a letter (in Spanish) asking to what United States tribunal had been given the jurisdiction previously residing in the *Tribunal Supremo* of Madrid, and urging that, as a case of murder had occurred during the jurisdiction of the said *Tribunal Supremo,* the person convicted of the crime would be deprived of a material right if his case were not passed upon by a successor to that court. Then the Governor replied to the Chief Justice that inquiry would be addressed to the United States Government upon the subject, and advised that the case be held in abeyance pending a reply, the accused being held in the custody of the

court. Fortunately there was no limit of time prescribed by the law within which reference to a court of cassation must be concluded or the accused set at liberty. An appeal was then sent home for the designation of some court to have cognizance of such cases; and it was hoped that some day that would be done. The incident furnishes an illustration of the perplexities that at times have to be faced by officers of the Navy.

The clerk of the court, of whom mention has been made, was a Filipino lawyer of standing, Don Julian Gerona, a pleasant gentleman, and one of a number of prisoners sent from Manila with Mabini for safekeeping. With one or two others he was paroled from the Presidio of Asan, where they were interned, and allowed to live in Agaña. He was given a small salary for work as clerk of the Supreme Court, for which position he was well equipped by his education and practice at the bar. His services were certainly invaluable, the troubles in the Philippines thus affording a material assistance to the Governor of Guam.

Those Filipino prisoners had been sent to Guam from Manila, with the consent of the Navy Department, in the spring of 1901, as a safe place of detention. Their unheralded arrival created quite a little problem as to where to put them; property rights were as jealously guarded in Guam as in Washington or Manila, and suitable and accessible locations for a camp were hard to find. Finally I pitched upon a Government reservation at the village of Asan, on the road between Agaña and Piti, where, years before, an attempt had been made to establish a leper colony. Under careful supervision by officers, including surgeons, everything on that place was put

to the fire and the whole place burned over, until the Senior Surgeon was confident that dwellings could be erected there absolutely without danger. The army officer in command of the expedition was then notified and in a very short time he had a camp established, the transport having brought all necessary lumber and other building material. I then placed that officer in command of the post to which was assigned the name Presidio of Asan, and enough junior marine officers and men were placed under his orders to maintain the post properly. After some months the army officers were withdrawn and the post was placed under the command of a marine officer.

Those Filipinos were not military prisoners. They were of prominence as civil members of the insurrection and comprised several eminent men. Their leader, Señor Mabini, the secretary and reputed brains of Emilio Aguinaldo, was most influential and powerful despite his paralytic condition. Their lot was not a hard one in Guam. When it was learned that we were leaving, so that I could carry out some special orders, and not knowing whether or not we would return, they begged Mrs. Schroeder to accept a dainty, little, illustrated Japanese book of songs, entitled *Oyucha San,* done in crêpe paper, on the fly-leaf of which was written:

The Philippine prisoners of Guam cannot forget
Mrs. Schroeder:
As a living remembrance of the kind-hearted American lady,
Guam, August 4th, 1901,
In the prisoners'? name.

After this followed a number of signatures, among which could be recognized Ap. Mabini, Pio del Pilar, G. R. Ricarte, Mariano Llanera, Pablo Ocampo, and others. The interrogation point after the word "prisoners" seemed to indicate an appreciation of treatment tending to mitigate the rigors of captivity. Mr. Ocampo was afterwards Philippine delegate in Washington for some years.

We did return, the occasion of my absence being duty as a witness before a court of inquiry in Washington, allusion to which is made later; and I was still Governor when the prisoners were returned to Manila in the autumn of 1902, all having taken the oath of allegiance with the exception of Mabini who had the courage of his convictions and was irreconcilable.

Competent Islanders were gradually brought forward, as they became known, and placed in positions of increasing responsibility. At last, one appointment that caused a considerable amount of wondering but gratified comment was to the office of Auditor of the Island, whose periodic inspections included verification of certain Executive accounts kept by me. The gentleman appointed to this place was the officer who had been sent out to the U.S.S. *Charleston* at the time of the capture of the island by that ship, to convey the regrets of the Spanish Governor that he was unable to return what was thought to be a national salute but which was actually the bombardment of the harbor forts. He was made prisoner at the time and taken away, but returned later, resigned from the Spanish Army and obtained permission to transfer his allegiance to the United States. Remaining in the island where he had married and where all his interests were, he gradually

obtained recognition of his capabilities and usefulness. It is said that when he was confronted with the duty of inspecting and O. K. ing the Governor's accounts, he experienced no little embarrassment.

As an instance of the trials, other than those of human agency, that occasionally test the endurance and the patience of the good people of Guam, may be mentioned the terrific hurricane that passed over the Island in November, 1900. Close questioning of the older inhabitants revealed the fact that in every case in their recollection the wind had come first from the north, afterwards veering or jumping to the eastward, which showed that the center invariably passed south of the island and that was the case on November 13, 1900, but the center did pass actually over the southern end of the island, producing a storm more severe than any that had been known for years. None had approached it in severity since a noted one in 1855. Most fortunately it occurred in the daytime, the maximum intensity lasting only a few hours.

It first began to be realized at about four in the morning that something unusual was happening. The barometer was falling rapidly, and the wind was so strong that the storm shutters in Government House had to be closed, barred and supported as well as possible from inside. One shutter after another was crushed in and everything wrecked within. Not long afterwards, a fierce, ripping sound announced that the galvanized iron roof had begun to go, and in a short time the whole of it had been deposited in greater or smaller sections on the slopes and summit of the high ridge at the back. The occasional downpours of drenching rain added their quota to the terrifying conditions; and as cellars are

unknown in Guam, not much refuge was to be found anywhere. At about noon the wind shifted rapidly to the eastward, showing that the storm had passed to the southward and was speeding on its way westward. I made my way out to see if anything could be and was being done to help the townspeople, but I found that several parties of seamen and marines had anticipated me and were at work rescuing those in danger. The fury of the wind made it impossible to stand or even to crawl in exposed places; the only recourse was to lie flat and roll or wriggle to the shelter of some wall or low ruin. I reached a piece of wall and stood behind it for a moment to catch my breath, but soon was driven from there by fragments of it being blown off and down on me; fortunately the fragments did not have far to fall, and, although brought to my knees, I escaped injury beyond a few bruises and a wrenched shoulder. By that time practically everything in the shape of tiles, timbers, roofing, and coconuts that could be blown about had already been blown away and there was less danger from that source. But the sea was slowly rising, sucked up by the diminished atmospheric pressure indicated by the low barometer; and its majestic swelling was awe-inspiring as, without a wave, it engulfed all the low parts of the town, finally reaching the plaza in front of the Palace. There it stopped, and the waters gradually receded as the barometer rose. The barometer (mercurial) reached the phenomenally low point of 28.17 inches at Agaña.

By three o'clock the wind was sensibly falling. A report came that one of the two station ships in the harbor had disappeared, and I started out on my powerful pony to go to Piti, but could not reach it. It took nearly an hour and a half to reach the little

river Pigo a mile and a half away, after struggling through a maze of overturned coconut and breadfruit trees, telephone poles and wires, remains of houses, and *débris* of all kinds which encumbered the almost obliterated road. At times a detour had to be made and we floundered in swamps up to the horse's belly, or struggled through almost impassable thickets. The sturdy animal, which seemed to understand that there was something out of the usual, did his best to meet the situation. But the bridge over that small stream was gone, and the torrent was so deep and strong that it was useless to attempt to force the horse through it. As it was a small stream its waters soon subsided, and a courier managed to get through some hours later.

The station ship *Yosemite* had indeed disappeared, but no one either on shore or on board the collier *Justin* could tell how or where, the blinding spray and rain having entirely concealed one ship from the other. As was learned later, she had at first been driven by the north wind against the coral-lined shore on the south side of the bay; and when the wind shifted to the east she was torn from there and driven out to sea, the rising of which enabled her to pass over the Callalan bank, on most of which ordinarily there is not enough water—a most fortunate circumstance, for if she had been stopped by that bank, she would inevitably have gone to pieces and every man on board would have been drowned. As it was, she drifted over it and the people on board were eventually saved, although the ship herself was doomed. Nothing was known of this at the time, for the bay is so deep that a ship could sink there and her mastheads not show above water. But, in the hope that she had safely passed out in some way,

orders were sent the next morning to the *Justin,* whose heavy ground tackle had fortunately held, to put to sea instantly and search according to instructions quickly but carefully deduced from a study of the various phases of the storm. To the unspeakable relief of all she came up with the *Yosemite* the next day many miles to the northwestward, but she was a hopeless wreck; down by the head until the propeller, twisted and broken, was nearly wholly out of water, rudder and rudder post gone, unmanageable, helpless. Blinded, buffeted and bruised by the raging elements, her people had battled with unflinching courage to keep her afloat; but some compartments had been bilged and she was slowly settling, the collision bulkhead, strengthened and braced with all resources available, alone standing between them and the deep sea. The *Justin* tried to take her in tow, first by the bow and then by the stern; but nothing availed, and, as she could not possibly remain afloat long, the commanding officer, Lieutenant B. B. Bierer, wisely decided to abandon her, and the officers and crew were transferred to the *Justin,* taking with them all money and papers and such other public property as it was possible to save. Then the U. S. S. *Yosemite* went down with her colors flying; and after she had taken the final plunge the people on board the *Justin* stood with bared heads while three volleys of musketry gave to her the burial rites of a human.

The way in which the *Yosemite* left the harbor remained a mystery for some time, those on board not being able to see a thing and having no idea of how or where they were going until, some time later in the day, the conditions permitted a sight of the Island many miles to the southeastward. It was not until

some months afterwards that some fishermen reported a large iron chain stretched taut across the Callalan bank; and investigation showed that it was the *Yosemite's* cable which evidently had parted as the ship drove out over the reef.

The ship's steam launch had been sent inshore early on that fateful morning, but it never reached the shore; and neither it nor its crew of five seamen were ever heard of again.

To the Island that hurricane was a severe blow. Agaña and most of the other towns were laid in ruins, nearly all houses except those of coral masonry being practically destroyed. In Agaña there had been little loss of life; but at the southeast corner of the Island a huge wall of water coming in from the sea overwhelmed the village of Ynarajan, killing or drowning twenty-eight persons. A small ketch, also, belonging to a trading company, with two men on board, was never seen again. The frame and thatch houses were easy to rebuild; and on the next morning the patient and cheerful Chamorros were hard at work, and a few words of sympathetic encouragement brought forth smiling assurances that *"No importa, Señor Gobernador."* But all food resources of the Island were destroyed, and the people faced starvation. What provisions there were in the trading houses were immediately commandeered (and paid for out of the slender Island funds) in order to prevent any possible raising of prices and in order to issue them in carefully proportioned rations to those who were unable to buy. The soil and the climate are such as to produce each year several crops of corn and other things, but food had to be issued in diminishing amounts for some months while new crops were growing. The stock available on the

Island would not have lasted that long; so the slow-going, old *Justin* was sent to Manila, 1200 miles away, and returned in the course of time with a certain amount of naval provisions—of which unfortunately a very considerable proportion was found to be unfit for issue. But the immediate emergency was weathered, and the most serious matter was the severe injury to the coconut trees. The experienced planters said that it would be four years before any copra would be again exported; they were right, and for that length of time that source of personal income was denied them. It was much the same with their coffee and cacao.

The very aspect of the Island denoted desolation. Every green thing was withered as though burned. Two weeks later the U. S. S. *Solace* arrived from San Francisco, bringing, among other passengers, the missionaries and my family—my wife and five children, a friend and governess, Miss Kanely, and a piano. Approaching with senses alert for the expected, luxuriant, tropical verdure, they were gradually reduced to wondering silence by the sight of shores and hills all brown and dead; not a ship was in the bay nor was there any sign of life until the health officer's boat was descried pulling out. So the exuberance of meeting was somewhat stilled. But all were soon transferred to the shore. The mechanics of the Naval Station and all other men who could use any tools had been working overtime every day, on their own initiative, to get Government House roofed and fit for occupancy in time for the family to move right in. This showed a pleasing spirit that was appreciated.

A projected tour over the main southern portion of the Island for the purpose of becoming acquainted

with the people and the country, inspecting the various villages, and examining into the possibility of connecting all by good cart roads was considerably delayed by work attendant upon the storm. But early in January notice was sent out of the prospective visit, with a request to the various *gobernadorcillos* that roads be cleared. The amount of work done in response was prodigious and the task set was accomplished. The first objective was Ynarajan, the southernmost town; the distance was about twenty miles, and for a good deal of it the trail was through what had been impenetrable jungle; all along it, on the day set, one could see the newly cut tree trunks, bamboos, and all kinds of small and large brush. In one place there was a really artistic improvised rustic bridge over a small ravine and stream; not a timber in the structure was heavier than a two- or three-inch sapling, although it was fully twenty-five feet high and fifty-odd feet long; and there was not a nail in it, it being held together by lashings of some sort of cane or wicker; yet those heavy carabao, a native water buffalo, passed over it without causing any apparent strain or creaking.

That first day's journey to Ynarajan afforded a fair idea of the variegated nature of the physical aspect of the Island. Sometimes the trail would be up on the high lands, a thousand feet above the sea, then it would wind its way down until in places it crossed a hot stretch of pebbly beach, dotted here and there with small, iron-wood trees. Upon approaching a stream the party would be enveloped in a jungle so dense that one could not see ten feet into it. In places the ascent or descent would be at an angle of certainly 45 degrees; but those sure-

footed beasts never made a misstep. At dark we were met by the *gobernadorcillo* of Ynarajan and a party of men with torches made of fagots of light wood strips which, when lighted, produced some weird effects. In places the scene was picturesque in the extreme, especially at one spot; we had been winding downward for some time through the jungle when we came to a little stream that had to be forded. The water was two to three feet deep and quite swift. On one bank stood a gigantic breadfruit tree, the branches arching overhead and drooping here and there, and the fitful glare of the torches would simply illumine an occasional trunk or a branch at some distance out in the darkness, while the forms of the guides and bull-drivers seemed as shadows against the sparkling water. Upon clambering up the steep bank beyond one could outline only the dark, cumbersome mass of the leading animal nearly overhead and threatening to come plunging down.

That night we were put up in a good, substantial, stone building, one of the very few that had survived the storm and on which a new roof had just been completed.

Up bright and early the next morning, an hour or so was passed in examining the condition of the people and their immediate needs. The devastation throughout all that part of the Island was found to have been terrible, and the suffering and privation were still great. Food was scarce, nearly all that some had to eat being from the bounty of the Government. They had only two boats left, with oars and sails for only one, while it took twenty-four hours to go in that way around to the harbor at Piti to get the provisions. The townspeople gathered in a very respectful crowd as we prepared to depart, and I

made a short address, urging them not to be discouraged but to take energetic measures to remove all vestiges of the disaster, and promising that in the meantime, while the new crops were growing, the Government would take care that they should not want food. I also promised that, if they would send to Agaña over the recently cleared road two days later, they would be given a complete outfit for their other boat. This seemed to be much appreciated.

Leaving there, the itinerary adopted led around the south end of the Island to and through the towns of the West coast—Merizo, Umatac and Agat. None of these had suffered so much as the other towns, because they were partially protected by the high lands, especially when the wind had shifted to the east; but the crops had been ruined as elsewhere and the people were still somewhat dependent upon the Government rations. At Merizo, the first stop, the party was accorded a right royal welcome; every one was in holiday attire and the entire village was decorated with white flags. Practically the entire population was lined up at our approach—the women on one side of the road and the men on the other—and salvos of musketry were fired, and split bamboos, held apart by a clever trigger arrangement, snapped together with a noise like the report of a pistol. A good-sized American flag was carried, and the *gobernadorcillo* called for *Viva el Señor Gobernador,* and then *Viva la America* and so on. One old woman was particularly enthusiastic, and after *vivaing* everybody and everything, she made a dash for me and seizing my hand kissed it in a most respectful fashion, which example was followed by a dozen others both old and young. Then a start was made through the town, the mayor at the Governor's side,

half a dozen graceful young girls waving white flags and dancing in front, and a band consisting of two fiddles and an accordion bringing up the rear.

That town was the best kept of any in the Island, as was evident even at that time, and opportunity was afforded for complimenting them upon it on our arrival at the mayor's house, for, as we started up the steps, the crowd surged forward and became perfectly silent, and I had to make another short address in Spanish, most of which they probably understood.

From Merizo on to Umatac and Agat it was somewhat hard traveling, a good deal being up tremendously steep ridges and down again, and some parts being along hot, sandy stretches on that shore sheltered from the prevailing breeze. The walk or bullback journey ended at the little village of San Luis d' Apra, on the south shore of the bay of that name, where a boat was ready and the Chamorro crew pulled with a racing stroke three miles to Piti, which we reached at about sunset, and where the little victoria was waiting and took us home at a rattling pace in time for dinner.

Many other such trips were made at various times during my tenure of office. They formed a pleasant break in what might easily have been allowed to become a monotonous routine; and they kept me in touch with the people, something that I considered quite important.

The Island gradually resumed its serenity, at least in appearance, after the visitation. In about two years there was fair promise of return to normalcy. But then, as recorded in the log of the Naval Station for September 22, 1902, "At 11 : 24 A.M. experienced a violent earthquake which did much damage to

buildings." It is amusing to note the immediately following entry in that same journal, "At 11:24 A.M. summary court-martial adjourned."

That earthquake exceeded in violence any in the recollection of the oldest inhabitants. Slight quakes had been of frequent occurrence and elicited no special comment; indeed, the ladies used to take out their watches quickly to time them. But this one was a very different matter. I was at my desk, with my aide, when an initial tremor was felt vigorous enough to make me stop writing; when, a few seconds later, a book was thrown from a bookcase some five or six feet across the room, a hasty retreat was made to the adjoining high terrace at the back of the house on a level with the second floor. While standing there with feet apart and legs bent and braced so as not to fall, a heavy iron ship's tank, three feet cube and full of water, resting on solid supports, was observed to rock violently, opposite edges rising alternately as much as three inches from the platform. Most of the similar tanks at the houses of officers or missionaries were afterwards found to have been thrown down.

The vibration was at first in an approximately north and south direction, as indicated by the book being projected northward from the bookcase; but afterwards when that water tank was rocking, it was the eastern and western edges that rose and fell, and the high, retaining wall of the east side of the elevated terrace swayed out and back several times, most of it finally coming to rest again in proper position. The motion was astounding; everything seemed to be dancing, and sure-footed bulls tripped and fell to their knees. From the terrace a cloud of dust was seen rising in one part of the town indicating the

collapse of a coral masonry house, and then another, and another. Practically every such building in the Island was damaged if not entirely shaken down. The integrity of the immensely thick walls of the Palace was not marred, but the rafters of the roof working back and forth detached masses of the coral masonry which crashed down everywhere through the ceilings. Fortunately my family had gone home some months before, or they would probably not all have escaped injury in that wreck.

It made me sick at heart to see the newly built Maria Schroeder Hospital across the plaza apparently badly distorted. Fortunately there had been intelligent technical supervision of the design, so that, however distorted, it could be and was restored to good and safe condition. It had been built by popular subscription; and the townspeople of Agaña, in a peculiarly artistic memorial, drawn by one of the Filipino prisoners and which recited Mrs. Schroeder's many virtues, had prayed that she would allow it to be honored with her name.

A culminating tragedy was that the bell tower and one wall of the venerated old church in Agaña were practically demolished after having resisted all nature's assaults during two centuries and a quarter. A somewhat impressive incident in several places was that the vibration caused the earth to open in crevices of varying lengths and several feet deep, which, closing again, would cause the water lying in them to squirt up. The finely constructed roads of *cascajo* (decomposed coral) were badly damaged here and there, and bridge abutments were destroyed. The water in the bay of San Luis d' Apra, one hundred to one hundred and fifty feet deep, became of a

milky white appearance, caused by the shaking up of the coral sand bottom.

For weeks and diminishingly for several months, the earth seemed to continue in a state of incessant, slight tremor, punctuated at times by a very perceptible shake. Then people sitting together, or at table, would stop talking and look conscious while casting reconnoitering glances toward the door.

Some concern was felt for the little German-owned island of Saypan, about one hundred and twenty miles to the northward, as it was known that they had no station ship and it was apprehended that the convulsion might have been more violent there and attended with more serious consequences. So on the second day after the *temblor,* and while our island was still jumping, the collier *Justin,* the only ship left after the loss of the *Yosemite,* was sent there with a surgeon and some medical and other supplies. But she returned in a few days and reported that, while our neighbor had been severely shaken, there had been no loss of life nor any very material injury.

The Islanders quite cheerfully began to rebuild their masonry houses, just as, two years before, they had rebuilt the frame houses damaged by the hurricane. With a view to better preparation against a recurrence of either one of those types of catastrophe, the *Jefe de Obras Públicas* prepared a set of building specifications designed to meet either contingency; and it is hoped that those rules may have diminished the severity of the effects of subsequent disasters.

So the time passed, without too much monotony. It had not been the intention of the Department to keep me in Guam more than a year; but it came to

be recognized that a longer period was not seriously objectionable. When finally relieved, I had been there thirty-one months, with a break of only two and one-half months in the autumn of 1901, caused by my being called to Washington as a witness before the Court of Inquiry, asked for by Admiral Schley to pass upon his conduct during the war with Spain. The gunboat *Yorktown* appeared at Guam one morning in August and took me and my family to Yokohama, whence I proceeded by passenger steamer, leaving my family there. It was a long journey to and from Washington, and I was before the Court for only about two hours. The verdict of the Court is a matter of official record and history.

Returning to the Orient, I met the family at Yokohama and we went back to Guam in November in the same gunboat that had brought us away, and resumed our life there, refreshed by the outing.

But by the time that winter and the next summer had passed, we recognized that growing children should not be kept in that climate any longer, and in August, 1902, my family went home, fortunately escaping the earthquake in November. My relief arrived on January 30, 1903, in a new station ship; and I returned to San Francisco on the next return voyage of the Navy transport *Solace* in February. On this voyage there also came away with me Civil Engineer and Mrs. L. M. Cox, with their young daughter, Katharine, and Mrs. F. G. Pyne, the wife of the Pay Officer of the Station, and her infant son, Freddie, born on the Island.

My leaving the Island was not without regret, as I had learned to like the people and was interested in their welfare. At the same time I realized that any great length of time passed in such circumstan-

ces by a Naval Officer must be a period of professional stagnation. A moderate amount of duty of that kind can do no harm; indeed, the scope opened in the broadened vista and the regulation of affairs affecting the happiness and well-being of a helpless community, however small, cannot fail to bring out all that is generously responsive in the mind and temperament of a self-respecting man and to cultivate a sense of responsibility. It was with the keenest pleasure that I noted expressions and evidences of friendly concern among the islanders over my departure; whether successful or not, my efforts in the direction of their welfare evidently were favorably regarded.

## CHAPTER XI

### GENERAL BOARD—U.S.S. "VIRGINIA"

Chief Intelligence Officer—Change of name of the *Chesapeake—Ontario* and *Erie*—Contest over type of ship required—Beginning of a submarine force—Superposed turret system—Shaking down—Review at Oyster Bay—Rush orders to Havana—Intervention—Naval Landing Force—Rammed by S.S. *Monroe*—Silver service—Record coaling ship—Selected for flagship of division—No whisky on board—Inturning screws—Joins the fleet—Jamestown Exposition—Pilgrims' Memorial Monument, Provincetown—Ambrose Channel.

Upon my return home from Guam in the spring of 1903, I was ordered to duty as Chief Intelligence Officer of the Navy, the title of which office has since been changed to Director of Naval Intelligence.

With that change of title has gradually come a decided expansion in the activities of the Office of Naval Intelligence. There had been little change in scope during the seventeen years since I first went to duty in that office, nor was the atmosphere of the Navy Department favorable to the assumption of certain activities that I tried to assume because of their having no interested governing head. Since then the Office of Naval Intelligence has broadened on lines different from those on which I was groping, and the activities that I tried to vivify have been mothered by other officers. As a result my energies

were mostly directed to the perfection of internal matters and methods.

Nevertheless, occasions would arise calling for interested action, not immediately concerned with the Office of Naval Intelligence. In the summer of 1905, when the remains of John Paul Jones were brought home for burial at Annapolis, the selection of the Naval Academy for that honor had presumably in view the purpose of keeping alive in the minds and hearts of our midshipmen and other officers the traditions of a glorious service, the fostering a patriotic pride and stimulating a laudable spirit of emulation. In violent contrast to that purpose was the maintenance at the Academy of a midshipmen's practice ship bearing the name of the vessel which, in our early history, furnished a unique instance of a United States ship lowering her flag to an enemy of equal strength. When to that practice ship, of recent construction, was given the name *Chesapeake*, it was undoubtedly simply in compliment to the handsome bay near which the Academy stands, without thought of the unfortunate vessel that had twice been captured by British craft.

The first *Chesapeake* was attacked in 1807, a time of profound peace, by the *Leopard* to obtain possession of four men who were claimed to be deserters from the British Navy and whom Commodore Barron had refused to give up. The action lasted less than a quarter of an hour, the *Chesapeake* having sailed from port in such condition of unpreparedness that it was only as the flag was coming down that Lieutenant Allen managed to fire one gun by means of a coal brought from the galley fire. The *Leopard* took off the men; the *Chesapeake* returned to port;

and Barron was court-martialed and suspended for five years.

About six years later, in 1813, the same ill-fated frigate sailed from Boston to meet her challenger, with a hastily assembled crew, mostly foreigners and without training. Pitted against Captain Broke's superbly drilled ship the fight was short, and the gallant Lawrence fell, his dying words being, "Don't give up the ship." But the *Shannon's* boarders hauled down her flag, and she was towed a prize to Halifax.

With all veneration for the heroic Lawrence, the name of a ship twice captured by an enemy of equal strength has no proper place in our Navy list. All this I recited in a letter to the Secretary of the Navy, protesting that to retain that name would seem to proclaim to the world that traditions have no value, that the American Navy has no history, that Americans have no pride; and I suggested that the name be changed to Severn, that being the name of the stream which flows beside the Academy grounds. Secretary Morton carried my protest to President Roosevelt who quickly wrote on the letter, "Approved. T. R."

Encouraged by this and impressed by the evident fact that the non-seagoing element in the Navy Department attributed very little importance to the naming of ships (for example Vesuvius, the name of an Italian volcano given to an American ship), I sent in a letter not long afterwards urging that the names Ontario and Erie, assigned to two colliers then building, be changed. Those names must have been given in connection with the two Great Lakes of those names; there was an American town named Erie after which one of them might have been named,

but the only town of Ontario was in Canada. So they must have been named after the lakes; and in any naval mind Lake Erie must be associated with the Battle of Lake Erie of which the Navy had just cause to be proud, and to my mind it did not seem fitting to commemorate that in a collier. I also dwelt upon the convenience of having class names for ships, to the end that upon receipt of any advices concerning them it would be known at a glance what kind of ships they are—whether colliers, supply ships, hospital ships, or what not. In making a suggestion as to the best class of names, having in mind that coal is a mineral, I advanced such names as diamond, opal, ruby, etc.; but by an inadvertence I used the term "gem" instead of "mineral," and by that I lost half of my contention. The Secretary at that moment, Mr. Bonaparte (we did not have any one man as secretary long in those days), in forwarding the letter to the President, indorsed favorably the suggestion for a change but disapproved the proposition to name the ships after gems, and recommended Prometheus, who stole fire from Heaven through a tube, and Vestal, the name given to the virgin priestess who guarded the sacred fire in the Temple of Vesta. This recommendation was approved. Had I had the opportunity to be heard in rebuttal, I should have pointed out that those two names exhausted that class, and that, as we were bound to have more than two colliers, the convenience of a class name would not be achieved. But there was no opportunity. As it happened, however, those two ships were soon converted into repair ships, and for that service the names were not bad. In naming newly built colliers since that time, resort has been

had to heroes of mythology which form a very distinctive class and carry out the idea.

The Chief Intelligence Officer was *ex officio* a member of the General Board, the creation of which had been a great forward step. Prominent in its work was the keeping posted as to what other navies were doing, keeping in touch with the latest and probable future developments of naval *personnel* and *materiel* and methods, and being ready with advice as to what should be recommended to Congress. Specific annual reports were made as to what additions to the fleet seemed desirable in the coming year, these reports being the result of careful surveys of the situation with a view to a logical continuity and maintenance of balance.

The only occasion of the Board's efforts being antagonized was in the year 1903, when the Chiefs of the technical bureaus made a recommendation looking to the continued construction of a class of armored cruisers of about 14,500 tons, which the Board considered of very limited value in the composition of the fleet. The insistence of the bureaus upon that point was an unfortunate digression from their regular and useful path. It would be difficult to frame a system more excellent for its purpose than that of the bureaus of the Navy Department. To hold within the cognizance of each individual bureau the study, experimenting and production of such component parts of a ship as naturally demand undivided, specific attention, and to hold the officers on duty in it responsible for the efficiency of their products—that constitutes a system which from its very nature spells success. But there is no system or enterprise in the world that has not its limitations, and attempts to ignore them are bound to react unfavorably.

The term "coördination," of comparatively recent general use, represents an idea long supreme in the organization of all interior elements of a ship for effecting ship efficiency; but its application to the administration of an Executive Department of the Government is much more recent. Having in mind the cordial coöperation of all in the molding of naval affairs to-day, it seems difficult to believe now that there was a time when it did not seem necessary that the work of any one bureau should go further than to be perfect in itself without reference to its effect upon the aggregation of activities composing the entire ship. Yet one firm champion of the individual rights and duties of the bureaus had been betrayed into exclaiming that the bureaus actually were perfectly coördinated, that is, "having equal power," according to a dictionary definition; he ignored the other dictionary definition of coördination—"harmonious adjustment." Secretary Whitney, in his report for 1885, had said, "The inevitable result of throwing large executive duties upon any man is to disqualify him for council. . . . It is of first necessity to separate, as much as practicable, the work of direction and deliberation from the details of execution." It would be deplorable for so excellent an institution as the Bureau system to suffer from the *chauvinism* of adherents who refuse to recognize its limitations. The situation was saved when there came recognition of the value of a consulting body, such as the General Board, divested of all administrative authority, freed from the trammels of thought inherent in individual bureaus, and concerned with the efficiency achieved only by perfected, complete designs of fleets, squadrons, and ships. With it came the realization that a successful whole requires more

than that each part should be excellent in its own little self.

In the matter of those armored cruisers, their hulls were excellent, their machinery was excellent, and their guns were (individually) excellent; but their combination and their proportions made a misfit that was very apparent to those whose duty it was to determine the proportions of the various powers of offense and defense that would best meet the conditions of warfare such as we would wage.

The bureaus won their point; and those two new cruisers were built. But no more were built after that time. Futhermore when, a few years later, two of that class were wrecked, at different times, all idea of salvaging them was rejected for the stated reason that they were of no military value.

Like other continuing bodies, the General Board is not immune to dangers from within; but it is to be hoped that it will escape any pitfalls that may beset it. Possible danger may lie in failure to recognize that the greatest need of the Navy is always, first and foremost, what is best for the country.

The year 1903 witnessed the initial step in a new departure in the development of the fleet, and that was the formal recommendation by the General Board that two submarines be included in the year's construction program. Some years before, a few had been built for experiment; but none had ever been authorized as a part of the fleet, and there was some hesitancy in thus acknowledging and announcing the advent of a new weapon. But the motion was finally carried; submarines were included in our report which was approved by the Secretary, and Congress made the appropriation. In view of the outcome and subsequent developments, it has been the

source of some satisfaction to me that I happened to be the member of the Board who made the motion and carried it through.

That was the beginning of our submarine force, and it was made none too soon. There was no thought at that time of an arrested moral development which would lead to the foul work that shocked the civilized world some years later. Our submarines were built for legitimate war purposes; and we may be sure that they will never be used for anything else.

In the spring of 1906 the five battleships of the *Virginia* class were being completed at various shipyards and placed in commission. They excited a considerable amount of comment, favorable and unfavorable. The feature that attracted the most attention was that of the so-called superposed turrets, two 8-inch guns being in the upper part and two 12-inch in the lower part of each of two such turrets. They were not the first to carry guns in superposed turrets, the conception having been embodied in two vessels designed four years before; but the experience with those two paved the way to improvements that bade fair to make them the most formidable fighting craft afloat. A foreign naval attaché told me, while I was on the General Board, that he had so described the original two to his Government.

The *Virginia* class, however, were far ahead of those first two, the *Kearsarge* and the *Kentucky,* being larger, carrying a heavier battery, and with about one and one-half knots greater speed. An unfortunate circumstance connected with their appearance was that, when finally commissioned, their individual designs were seven years old. Three of them were authorized in 1899; but the amount of money appro-

priated was not enough to meet the bids of the prospective builders, so they had to go over for a year, during which the two others were authorized; then all five were begun, and it took over four years to complete them.

During that period of delay, it was to be expected that the steady advance in naval construction would subject many details to harsh criticism; but there was one dark horse of development that really did lead to ultimate condemnation of the superposed principle. That dark horse was the increase in rapidity of fire of individual guns. The object sought in placing guns on two levels was to secure the heaviest possible concentration of fire in any direction without interference between guns by blast or otherwise. It was an admirable solution to have one turret on top of another, the only objection to it being that the target for the enemy's fire became increased in vertical dimensions, with corresponding increase in probability of being hit. The best way to avoid increase of hits by the enemy, however, is to keep his fire down by raising the volume of your own. But, by a strange paradox, the great increase in the rapidity of fire of our heavy guns from, say, one shot in three minutes to three shots in one minute, virtually neutralized the advantage of having 8-inch guns where they could be fired without interfering with the 12-inch. Whenever a gun is fired in a turret there is a certain amount of concussion which precludes firing another for a few seconds; and, even with smokeless powder, the heated gases linger for an appreciable time in front after each discharge, making it impossible to point for the next shot until they have been wafted away. With the two 12-inch guns in a turret firing alternately, and each able to fire every twenty sec-

onds, there would be only about ten seconds between 12-inch shots; and, if the 8-inch were to "butt in," they would probably interfere with the next 12-inch shot—the last thing to be thought of. As that problem gradually developed, and the rapidity of fire increased, each ship tried different combinations of fire to obtain maximum opportunities for fire—single-barreled salvos, double-barreled salvos, double-barreled 8-inch salvos combined with single-barreled 12-inch, and so on. But the ultimate conclusion was that rapidity of fire had knocked out the superposed turret.

I was ordered to the command of the *Virginia* in the spring of 1906, and we went into commission at the Norfolk Navy Yard on May 7. That class were the heaviest and most formidable vessels ever built for our Navy up to that time, being of 15,000 tons displacement with a little over nineteen knots trial speed, and carrying four 12-inch, four 8-inch in superposed turrets, and twelve 6-inch guns, besides a good secondary battery of 3-inch. In size they were surpassed within a year by the *Connecticut* class, which were 1,000 tons larger; and after that displacements continued to increase at a rapid rate. The increase in displacements would not have been logical but for the suddenly conceived idea which first bore fruit in England, of mounting only guns of one heavy caliber, producing the so-called Dreadnaught type. So long as the main battery could consist only of four heavy turret guns and a mixed battery of other lighter ones, including a number in broadside casemates, no great advantage attended increase in size. Indeed, when struggling within the restriction of that main battery, there was opportunity, in increasing the size, for embarking on varia-

tions of disputed advisability. For instance, the *Connecticut* being 1,000 tons larger than the *Virginia,* a part of that additional displacement was naturally utilized in substituting 7-inch for 6-inch guns. The 7-inch is undoubtedly more powerful than the 6-inch, and its weight would be felt in battle, but there was a certain disadvantage in the change because of its introducing a new caliber with the attendant ills of increasing the number of different calibers of ammunition, indices of powder, spare parts and accessories, all of which would add to the difficulties especially with the reserves of ammunition, etc. By concentrating main battery power in one heavy caliber and increasing the number of turrets, an increase in displacement means proportionately more heavy guns and consequently an increase of fighting power until a point is reached where other elements affect the problem. But that point was not reached for some time after the first cruise of the *Virginia.*

Those ships had one bad feature with which I was impressed before we went into commission. One day while swinging ship for the compasses outside the capes of Virginia I noticed a remarkable sensitiveness to a light swell. I wrote to the Naval Constructor at Newport News asking about her metacentric height as it seemed to me she promised to be very lively in a seaway. He replied that, from the data at hand, the metacentric height would probably be between five and one-half and six feet, and that my surmise as to liveliness would probably prove correct—which it surely did, later. Upon several occasions she rolled 34 degrees to 37 degrees, and had lifeboats swept away despite the high freeboard, when smaller vessels suffered less.

Upon leaving the Navy Yard we were permitted to cruise for training independently for a while, an excellent plan with the green crews of that time but one that should be limited. Fleet training, the culmination of all efforts toward preparedness for war, is a thing of itself, of major importance. It is not only from maneuvering and exercising in battle evolutions that benefit is reaped in fleet work; efficiency is enhanced to a marked degree by uniformity of methods—homogeneity in all the acts and practices that make up the activities of the fleet. A ship or division that has been away from the fleet is quickly spotted.

At the end of August all available vessels were collected off Oyster Bay, on Long Island Sound, for a review by President Roosevelt. That accomplished a good deal more than simply the presentation of two rows of ships for review. Every vessel was in legitimate commission for service, and those that had been added to the force afloat during the immediately preceding months devoted all the time they could get to maneuvering together hurriedly for practice in the various evolutions of turning and anchoring together —simple matters, but matters in which many were novices. Determination of tactical diameters and adoption of a standard helm angle, practical appreciation of the rate of diminution of speed of the ship upon slowing or stopping the engines, or of increase of speed when signaling faster, all the elementary work necessary to safe and efficient maneuvering, occupied our time during the few days after the various ships began to assemble in the neighboring Smithtown Bay.

The one successful element in the efficient handling of a ship is the practical ability to plot with the eye

on the water ahead the path that the ship will follow when the rudder is used, without any stilted rules bearing upon the lateral displacement of objects in the ship ahead, or other visualizations which may at first appeal to an inexperienced judgment. To that end, I had three drifting buoys dropped at some five or six hundred yards apart in the open sea, and had all the officers take turns in practicing the following: entering at midway between two of the buoys, say A and B, put the helm over the estimated amount necessary to bring the ship to midway between B and C when on the reverse course, without changing the helm in the meantime; and, when midway between B and C, put the helm the opposite way the estimated amount necessary to circle around C and reach the same point midway between B and C without changing the helm in the meantime; and so on in figure 8 tracks. It was remarkable what failures there were at first, but what improvement followed practice.

Expertness in that maneuver is but a corollary to correct estimation of distances by the eye unaided. Personally I had always kept myself practiced in the latter important faculty, and a little later in the cruise I had opportunity to give a useful object lesson to such officers as were about. Returning to an anchorage in Cape Cod Bay, we were ordered to anchor with a certain ship on a certain bearing, distance one thousand six hundred yards. We approached on the bearing, but when near the assigned berth the midshipman with the stadimeter was not about. I kept eyeing the other ship and finally said to the Executive, "Let go, sir; you are sixteen hundred now." The anchor was dropped, and at the same moment the midshipman, who had suddenly ap-

peared with his instrument, reported: "Sixteen hundred and eight."

On September 2, the ships all anchored off Oyster Bay, in two columns up and down the Sound. There were present eleven battleships, four armored cruisers, five cruisers, a double-turreted monitor, and a number of destroyers, all of which formed quite an imposing array for that period of our naval history. The principal concern was the weather, especially on the morning of September 3, the day set for the review; it was drizzly, with light winds from the southward and westward, and the flags all hung limp, and, worst of all, there was not enough tidal current up or down the Sound to keep the ships swung uniformly in the double column. Lying at single anchor, they were pointed every which way, seemingly without any order, looking as much like a barberry hedge as anything else. But, nothing daunted, at eleven o'clock the *Mayflower* was reported standing out from Oyster Bay, flying the President's flag, and soon, following the motions of the flagship, all ships fired the national salute of twenty-one guns. Almost at the same instant the wind shifted to the northward of west, the rain stopped, the skies cleared, and the ships swung into two perfect columns between which the *Mayflower* stood on in majestic state. It was a marvelous occurrence. Of course, every one laughed and exclaimed, "Teddy's luck." That evening the ships were all illuminated, and the next morning all went their various ways.

After passing ten days at sea on our independent, shaking-down cruise, the *Virginia* went to the coaling station in Narragansett Bay, filled up with coal, and came down and anchored off Newport. Then occurred one of the most remarkable instances of the

ability of the American press to get hold of and publish things that are intended to be held confidential. Shortly after anchoring, I received telegraphic orders, in cipher, to proceed instantly on a certain duty, and it was impressed on me that secrecy was desired. The cornet was hoisted and a gun fired to recall all officers and men, and I posted on shore to report my orders to the Commandant of the Naval Station. On my way back to the ship, I met one of our steam launches going on shore with my wife and some friends whom I had invited to come on board to go with me to a reception at the Station. Naturally they were inquisitive about the cornet and the gun; something had to be done; so I concocted a remarkable lie. Speaking much louder than was necessary, with a view to being heard by all shore boats as well as ships' boats within a reasonable distance, I bawled to my wife, "I am feeling a little sensitive over people saying that we are in here attending receptions while supposed to be on a shaking-down cruise, so I am going right out and may be away several weeks. Good-by." Within an hour we were under way, standing out. As we learned some ten days later, the newspapers of the next morning contained a full account of where we were ordered and for what.

In obedience to those orders we joined the battleship *Louisiana* on the Southern Drill Ground, an ill-defined sea area off the Capes of Virginia, and proceeded in company with her to Havana where a political storm was raging with the possibility of the insurgents attacking the city. There was no telling in what direction our energies would need to be employed; it was only patent that the seagoing shaking-down that I had been giving the crew would possibly

be of little use in the impending situation. The fine material that we were beginning to enlist was indeed excellent in its character and spirit, but so woefully deficient in development and any kind of training that it presented an anxious problem to one contemplating their employment in any serious contingency. There being no probability of having to use the main battery, all efforts were concentrated, on the passage down the coast, on practice with small arms and secondary battery. Companies were formed on the quarter-deck and drilled in essentials; and ball cartridges were issued, and objects thrown overboard and the companies practiced in volley and independent firing at them.

Upon arrival at Havana on September 21, we found a decidedly serious situation—an insurgent army devoted to General José Miguel Gomez being massed outside the city limits on the west. Quite a number of our vessels were already there—battleships, cruisers and gunboats—and the way we were packed in that harbor was a tribute to the harbormaster and his assistants. On the next day Secretary of War Taft and Mr. Robert Bacon, Assistant Secretary of State, arrived as commissioners to act as peace mediators; and the Senior Officer Present, Captain Couden of the *Louisiana,* directed me forthwith to organize and prepare for active service the largest landing force that could be obtained from all the ships present or that would arrive. Lieutenant Commander F. L. Chapin, the Executive Officer of the *Louisiana,* was appointed my chief of staff. With the invaluable assistance of his active mind and clear judgment, the situation soon began to take shape.

We organized a force of about two thousand, five hundred seamen and marines from the heterogen-

eous lot of ships dropping in. None of these had yet been assigned to the Atlantic Fleet and there was no foundation of organization upon which to build, but by the evening of September 23 the last detail was completed. Some difficulty was experienced in the lack of maps and we knew little of the country beyond the immediate vicinity of the city and its residential suburb, Marianao; but a fairly good view was obtained from the military top of the *Louisiana,* and by means of sextant angles of prominent landmarks we were able to plot apparent strategic points and probable location of roads leading to them. On the day after our arrival, Commander Chapin and I went out in an automobile to verify a proposed line of defense and to gather such general information as might be obtainable. For the latter purpose we went out into the areas occupied by the insurgents, our uniforms showing that we were not of the Cuban governmental army. For some little distance the groups that we met seemed friendly enough, grinning and pretending to race their ponies against our car. But suddenly our American chauffeur, of long experience in Cuba, took advantage of a widening of the road and whirled about and started back at top speed, saying to me quietly, "I don't like their looks; we'd better beat it." We had seen enough, however, to learn that the natives were a sturdy lot, evidently inured to hardships; and they all seemed to have rifles, some of them apparently sawed off to facilitate concealment.

We had also learned the lay of the land so that we were able to perfect the landing arrangements. The geographical distribution was such as to make it expedient to divide the landing force into two brigades; every extemporized battalion had its organiza-

tion complete with pioneers, ambulance parties and machine guns; every company knew at what wharf to land and had a certain number of cars in which to entrain. They knew which of the three roads to take, where to get out and exactly what positions to march to and occupy; and every man had two days' provisions and a proper supply of clothing in his knapsack. I then reported that we were ready. Soon afterwards, President Palma having resigned, Mr. Taft proclaimed a Provisional Government, and sent word to the insurgents to fall back or he would land United States troops. This produced speedy results, and the insurrectionists disbanded.

The skillful handling of the situation by Mr. Taft and Mr. Bacon caused events to march so smoothly and so consecutively that there was soon every prospect of rest and quiet for the Island, at least until after the elections which were ordered to be held. Out in the ships we slept on our knapsacks, ready to jump into the boats at a moment's notice; but there was no call. One company was on shore for a while guarding the Treasury.

The Naval Landing Force did not fire a shot; but its prompt presence, no doubt, saved the city from immediate attack. Since a stronger, permanent force was needed to meet the general situation, and Mr. Taft having so advised the President, the Army quickly arrived and took hold. The naval force separated, the ships slipping away to various destinations; the *Virginia* in company with the *Louisiana* and the *New Jersey,* departed on October 13.

The Provisional Government was to last "long enough to restore order, peace and public confidence," and to hold elections. The elections resulted

in the inauguration of General Gomez, the political leader of the insurrectionists.

This was one of the not infrequent occasions that confirmed me in my opposition to the growing tendency to reduce the number of pulling and power boats allowed to ships. In Havana harbor there were tugs and barges available; but to commandeer them would paralyze the port, and our main reliance was on our own boats, always alongside and ready.

A matter that gave no little concern was the conspicuousness of the seamen's white undress uniform. The general color scheme of the Cubans, themselves and their clothes, was such as to make them blend very fairly with the landscape; but our seamen shone out very brilliantly in their white. The marines were all right in their khaki; and we officers obtained marine officers' blouses and equipped them with naval rank devices; but all that could be done for the seamen was to issue an unwritten order that, if the weather should be too hot for blue, the white jumpers and trousers should be rubbed thoroughly into the earth. I made a special report upon this subject when it was all over, urging that provision be made for similar contingencies in the future. But nothing was done.

The rest of the autumn of 1906 was passed largely in belated trials of the engines and the guns, all of which ended satisfactorily. Then occurred an accident of a kind that exasperates the helpless victim. We were standing up from Hampton Roads toward Norfolk, on November 3; and when in the dredged Channel near Craney Island light, the steamer *Monroe* of the Old Dominion line tried to pass us on our starboard side, going the same way. Very shortly after overlapping our stern, his bow began to feel

the indraught toward our stern; he then slowed, or stopped, and the indraught or suction drew his bow irresistibly toward us with the result that it smashed into us, denting plates, bending frames and beams, destroying a 3-inch gun, crushing two boats, etc. Upon seeing his bow swing toward our stern I rang for emergency speed ahead and put the helm hard aport, but that did not clear him; then as he swung past our stern, we were in the position of going ahead at emergency speed and rapidly turning to point across a rather narrow, dredged channel; signal was promptly made for full speed astern, and the order given to let go the starboard anchor and haul-to at fifteen fathoms, both of which were instantly obeyed, with the result that we did not touch the bank but swung safely to the flood tide. In the midst of all that trouble one could not fail to see and be amused at the activity of the crew of the Craney Island lighthouse. It is a "bug light," standing in five or six feet of water, and the collision took place nearly abreast of it. Of course, drawing some twenty-eight feet of water, we could not strike it, but when they saw that ponderous mass heading right for it with the smoke pipes belching forth volumes of black smoke, they did not enter into any calculations, but lowered their boat by the run and pulled away.

The explanation of the catastrophe is simple enough. As a ship progresses through the water, the lower part of the constantly forming void under the stern is filled from underneath; but near the surface there is also a lateral flow or indraught following the water line, and extending downward with diminishing effect. In a channel restricted in depth the strength of the lateral flow becomes perhaps a little greater because of the insufficiency of the flow from

underneath; and that was the case in the Craney Island Channel, and the *Monroe's* bow was drawn in. Another factor entered which I brought to the attention of the Navy Department in making my report. The *Virginia* had inturning screws; that is to say, in the upper half of the revolution the motion of the blades was toward the hull in going ahead; the action of the revolving blades, therefore, was to move a mass of water near the surface toward the ship at the same time that they would give the forward thrust to the propeller. This increased the indraught under the counter, so that the bow of the *Monroe* was more strongly sucked in toward the *Virginia* than it would have been if we had had the usual outturning screws. I urged this as a matter deserving consideration in any investigation that might be ordered. Our responsibility for the occurence was not in question, as we were the passive victim.

The liability, illustrated in this experience of ours, of an overtaking vessel being swept in under the counter of a leading vessel may have been the cause of not a few unexplained mishaps. A similar very serious case occurred about five years later, in September, 1911, off the Isle of Wight, when the bow of the British cruiser *Hawke* was swung against the counter of the White Star liner *Olympic,* of 45,000 tons. The *Olympic,* making eighteen or nineteen knots, had passed the *Hawke* which was about one-sixth of her size. When the latter had dropped astern so as to be just overlapping the liner, the commander of the *Hawke,* fearing that they were getting too close, ordered his quartermaster to "port;" but his ship began to swing to port, and he sang out, "What are you doing? Port. Hard-aport!" The

order was obeyed, but no helm could stop her; and, although both engines were signaled "Full astern," the *Hawke's* bow struck.

Leaving aside the professional questions involved in the handling of those two ships, and the consequent responsibility for the occurrence, it was admitted as beyond dispute that the cause was "suction, pure and simple." That is a good thing for commanders to remember.

As an unfortunate result of our peculiar mishap, the *Virginia* had to remain some months at the Navy Yard undergoing repairs; this militates against the morale and efficiency of a ship; but it could not be helped.

During our enforced stay the ship was presented with a handsome silver service voted by the State Legislature of Virginia, for the officers and crew of their naval namesake. The occasion of the presentation was a very pleasant one, the ceremony being participated in by officials of the State of Virginia, Colonial Dames, Daughters of the Confederacy, Daughters of the American Revolution, and other patriotic societies. Governor Claude A. Swanson came on board early with Mrs. Swanson and their party; and we had luncheon in the wardroom, after which several hundred guests of prominence came on board, all being received by my wife and eldest daughter.

Governor Swanson made the presentation on the quarter-deck in an address replete with patriotic fervor and appreciation of the important place held by navies in assuring the welfare of their respective countries. His salient points were these:

"Our past history has shown us the necessity for

a splendid navy and how many difficulties and disasters we have averted by our naval successes. The demand for a great Navy in the future will far transcend any which has existed in the past. The United States has ceased to be an isolated and provincial nation; it has become a world power, and must accept and perform its work, duty and responsibility.

"Our foreign commerce, our exports of mineral, manufactured, and agricultural products far exceed those of any other nation. By tradition, by honor, and by self-interest, we are compelled to maintain at all hazards the Monroe Doctrine and to extend our protecting arms to the nations of the Western Hemisphere.

"To be able to defend all our large interests and rights, to perform our part of the world's work, we require a large and efficient Navy. All our conflicts and wars of the future will either be upon the seas or in foreign countries. No nation is strong enough or foolish enough to invade our territory. Our future battles will be either for defense or supremacy on the seas. Our national greatness and glory are inseparably interwoven with the future of our Navy. In modern civilization, with its perplexities of trade and commerce, that nation will be paramount in the world and arbiter of its destinies which is supreme on the sea. Naval supremacy ultimately means national preëminence and triumph."

In a few well-chosen words, Rear Admiral Robert M. Berry, Commandant of the Navy Yard, accepted the gift on the part of the Navy Department and gave it into the charge of the officers and crew of the ship. Speaking for them, I made the following little address:

"In behalf of the officers and crew of this ship, I accept the charge.

"I find quite a particular personal gratification in being associated with the *Virginia* and with Virginians, recalling the circumstance that my earliest ancestors in this country first settled in the colony of Virginia—in about 1670. That seems a rather remote connection, but any one who has a peg, however small, upon which to hang a claim to kinship with Virginia is naturally bound to make the most of it.

"This, however, is rather beside the point. It is as the representative of the officers and crew of this ship that I have the honor to express the great pleasure that we all have in accepting the custody of this superb present. It is said that every pleasure is the father of a duty; and so, on festive occasions, we may have duties in connection with the use of these beautiful and suggestive implements. I think I may say, with reasonable confidence, that we will bring to the task the same single-mindedness and earnestness of purpose that have always characterized our efforts in other less enjoyable fields of endeavor. And I have no doubt that we will meet with a like success.

"On an occasion like this, to speak of our successes in other fields of endeavor may seem like lugging the subject in by the ears, yet I feel very sure that the gallant men and lovely women of Virginia, so aptly represented here, and who are cheering us on with this token of regard and confidence, will not fail to approve the assurance that so far their godchild has not been mentioned at any time in any public print or in any official report except in terms of commendation. From the prosaic, but very important, feat of breaking the record of the entire Navy for coaling ship to the more stimulating one of providing a de-

fense for the city of Havana against expected attack by the insurgents down in Cuba, this ship has made a fine beginning, I am glad to say, so far as her opportunities have permitted. Upon a recent occasion, even, when our Old Dominion friend endeavored forcibly to implant a new and strange 'Monroe Doctrine' in our midst, through our 12-inch armor, we successfully rejected his overtures and finally withdrew from the contest with full judicial honors.

"We are now looking forward with eagerness to joining the fleet where we hope to make good and hold our own. And I must assure you, sir, that the consciousness of having friendly critics at home to note our doings will be a far from negligible quantity in the sum of influences that make for efficiency.

"We beg to thank the State of Virginia and her respected Governor, and her representatives here gathered for their generous and gracious courtesy."

That ended the exercises on the quarter-deck; and the assemblage adjourned below where we had a light collation at which the beautiful punch bowl of the silver service was duly "wet." When the time came, all too soon, for the guests to depart, our band played "Auld Lang Syne," while we gave them cheers. The occasion remains a pleasant memory.

The allusion, in my address, to the "new and strange Monroe Doctrine," referred, of course, to the action of the steamer *Monroe* which ended in the collision with us.

In my address, also, the claim of having broken the record of the Navy in coaling ship was a true claim. It represented an attitude which ultimately led to our breaking the record of the world in taking coal on board with the conditions and appliances of

that time. We had a willing crew, and they were encouraged in every way; the Executive Officer, Lieutenant Commander B. C. Decker, and the Senior Engineer Officer, Lieutenant E. L. Bennett, who was also Fleet Engineer with me afterwards, collaborated in designating additional places for scuttles in the main deck, and in organizing the different phases of the work; and the other officers set contagious examples in their supervision. Upon one occasion, when the fleet was lying off Provincetown, we had to coal from a single collier alongside; the routine for any ship engaged in coaling was to signal at the end of each hour the number of tons taken on board during the hour, and when coaling from a single collier, 70 tons had been about the best report. Our first signal at eight o'clock was 130; the flagship made "Interrogatory," which signified "Your signal is evidently in error." But there was no error, so we kept the signal flying. The next signals in order were 158, 184, 176, 203, 220. Then some captains and other officers began to come on board ostensibly to make a visit, but really to see how we were doing it. One of our midshipmen told the Executive that he had overheard a captain and a boatswain discussing as they watched, and that, after they had commented on our rig of whips and size of bags and routes of trucks along the deck, etc., the boatswain said; "The only difference I can see is that their shovels seem to work faster than ours." Before that I had had occasion to publish to the ship's company a commendatory letter from the Secretary of the Navy in regard to having broken the Navy's record. The men began to look at record coaling as a special prerogative of theirs; and each operation was an improvement upon the operations that preceded, until, short-

ly after I gave up the command, with the coal brought alongside in barges in bulk they took on board 1667 tons in four hours, which was the world's record and for which they received a message of special commendation from the Navy Department. No doubt the pace set had a good effect in stimulating others in the race.

Coaling ship was not the only thing which the *Virginia* did well. When the five ships of her class were put in the fleet, as the Second Division, under the command of Rear Admiral C. M. Thomas, the *Virginia* was made flagship of the division. Happening to be in Washington for a couple of days at that time, I alluded to it in the Department, and the Chief of the Bureau of Navigation, Rear Admiral Converse, said to me, "That is because of the inspection that you passed. It is always well when a flagship can say 'Do as I do.'"

Admiral Thomas hoisted his flag on January 21, 1907, and shortly afterwards we got away from the yard, and joined the fleet in Guantanamo Bay. As a rule officers object, or pretend to object, to their ship being a flagship; but I think there is much to be glad of in it—if the Admiral is the right kind of an admiral. There is no doubt that, without in the least treading upon the toes of the Captain, a division commander can at least color the atmosphere by his personality; and if he is a disagreeable character no one but the Captain is apt to suffer much. I was very glad, as well as proud, that the ship was thus selected; and personally my experience was most agreeable.

A thing that had long been on my mind was that the law of 1862, abolishing the grog ration and prohibiting the presence of whisky and kindred liquors on

board ship, was being more and more disregarded in the service. This was not as it should be. I had a conference with the Executive officer which ended in my directing him to notify the officers that there must be no whisky on board the *Virginia.* The use of wine and beer was not affected by any law nor by any lack of general sanction; and I made it a point surely to have wine, as usual, on the table on all occasions of having officers in to dine with me, which I liked to do often. I was told afterwards, on good authority, that during the two years of my command, there had been no whisky on board the ship; this showed a fine spirit, and my successor in command, Captain Sharp, continued the attitude. This also afforded a small vent for fleet humor. There was a large, armored cruiser in commission, named the *West Virginia.* So far as I know, there was no reason to suppose that that ship was any "wetter" than the *Virginia;* but the humorists of the fleet could not be called off from speaking of the *Dry Virginia* and the *We't Virginia.*

There was a widespread misapprehension in regard to this matter throughout the country. When the order was issued by the Navy Department some years later, prohibiting officers' wine messes, there is little doubt that the great mass of people thought well of it as a check to whisky drinking on board ship; but there was no question of whisky at all; the order could only apply to wines. Whisky was already forbidden by law.

Among many perfections, the *Virginia* suffered from one curious imperfection. Of all the five ships of her class, one-design ships, the *Virginia* alone had the peculiar affliction of inturning screws, some of the effects of which were much more tangible than

those alluded to on page 289. The original Departmental designs were identical, so that divergence from normal practice must have been by the request of the builders whether as a part of a whole new design or as a modification of the Department's. The reason for the divergence was probably a matter connected with convenience in the engine rooms, possibly to facilitate having the reversing gears of the two engines near the door in the middle-line bulkhead separating the two engine rooms, so that one person there could have immediate supervision over both control points. It is easy to understand that, as the feature came under the eye of only the Engineering Bureau, no external effect was thought of as possibly resulting from it. But it did make a serious difference in handling the ship, as I quickly learned; the difference being that, while the other ships of the class could be made to turn as on a pivot by backing one engine and going ahead with the other, the *Virginia* did not respond to such manipulation.

When making up to a quay diagonally, the offshore engine will usually be backed when near the assigned berth in order to swing alongside; but that would not swing the *Virginia* at all, and the problem of putting her alongside without tugs, as not infrequently occurred, was one of concern and difficulty. Likewise, upon getting under way with the fleet in circumstances that required turning without headway, as in a narrow channel, the helplessness would produce a mortifying spectacle. I brought this to the attention of the Department, recommending that plans be made for a change in the engines with a view to having the change made at any time that the ship could be spared from service. But it was hard to bring conviction to any one who was not an actual sufferer.

Shortly before I was to give up the command, however, an instance occurred which was so striking that, out of consideration for the one who was to relieve me, I related it in detail in a special report with an urgent, final recommendation. The instance was this: The fleet was at anchor off one of our Pacific ports, and signal was made to get under way together, turn 180 degrees to starboard together without headway, and follow the flagship in column. While the other ships were turning together in beautiful symmetry, I rang "Astern, slow," on the starboard engine, and "Ahead, slow," on the port engine; the ship began turning almost imperceptibly to starboard. To hasten the maneuver, I rang "Astern, half speed," and "Ahead, half speed;" the ship stopped turning entirely. I then rang "Astern, standard speed," and "Ahead, standard speed" (standard speed meaning virtually full speed); and the ship turned to port, the wrong way. I had to disregard the signaled order, get headway on, and turn with the rudder in a large circle, to the astonishment of the fleet at such disregard—I fully explained this disregard afterwards.

My report upon that incident produced the desired result; upon the return of the fleet from the cruise around the world the change was made.

When once the extraordinary result of that unusual application of the motive power was observed, the explanation of such a result was not far to seek. It is commonplace that when the engine of a single-screw ship is backed it throws the stern to port—if the engine is of the usual right-hand type. Why is that? The upper part of the revolution of a propeller is in water less dense than that in which the lower part acts. Therefore, there is more resist-

ance to lateral push by the blades in the lower part of the disc of revolution, and the reaction causes the hull to move in the direction opposed to their movement, or, what is the same thing, in the direction of the movement of the upper blades. Consider now twin screws, say the starboard screw; if that is an inturning screw, the direction of movement of the upper blades in backing is outward, that is to starboard, and the tendency is to pull the stern of the ship to starboard, or the bow to port, which is the opposite direction from that which it is sought to produce by means of the leverage of the shaft pulling the starboard side of the ship sternward. At the same time with the port screw going ahead, its upper blades, moving toward the ship, or to starboard, will add an increment of effort to push the stern of the ship to starboard, or the bow to port which is the opposite direction from that which it is sought to produce by means of the leverage of the shaft pushing the port side of the ship forward. The efforts of both screws, therefore, are opposed to the efforts of the leverage of the two shafts to turn the ship's bow to starboard. The resulting effect will probably be somewhat affected by the shape of the hull—the breadth of beam, draft, fineness of lines, etc. The *Virginia* seemed to lend herself peculiarly as an illustration of the conflicting action of the opposing forces.

With outturning screws, when one is backed and the other turned ahead, the lateral effort of both is in unison with the push and the pull of their respective shafts acting through the leverage of their distances from the middle line, and the maximum turning power is thus obtained.

As an illustration of the general appreciation of

the effect of backing a screw, it is of interest to relate just here the drastic method of a steamship company some years before to nullify the action. When I was called to Washington from Guam, in 1901, as a witness before the Court of Inquiry, I took passage in a passenger steamer from Yokohama. Upon getting under way the Captain invited me on the bridge. I noted with surprise that, having to turn through sixteen points (a half circle) to point out between the wings of the breakwater, he turned to port, and backing the engine did not seem to interfere. When he was free to talk I commented upon that, and he said, "Come with me." He led the way down to an upper gallery in the engine room and asked if I noticed anything. I certainly did. The engine was so placed that the shaft did not lie fore and aft but in a direction pointing a few degrees to port as viewed from aft. It gave the compartment a very distorted appearance; but the object was achieved of nullifying the effort of the screw to push the stern to port when backing.

Upon leaving the Norfolk Navy Yard when our repairs were completed, and after going to New York to be docked, there being no dry docks in the vicinity of Hampton Roads, the *Virginia,* flying the flag of Rear Admiral Thomas, reported to the Commander in Chief at Guantanamo, and was quickly inducted into target practice and other fleet work. The target ground was westward of Cape Cruz, on the south coast of Cuba, an unsurveyed region possessing the feature of anchorage depths for targets and auxiliaries, but which had to be navigated with some caution until our small vessels had examined it thoroughly. Target practice methods were still somewhat in a state of flux, and, keen as all were to become profi-

cient, it was up-hill work. I think we would all have been happier if we had realized that it is through the hardest work of beginners for a long time that the result is attained of success achieved with less tense effort. Experienced gunnery officers were scarce.

By the middle of April we were all back in Hampton Roads. The good people of Virginia had set their hearts upon having an International Exposition to celebrate the three hundredth anniversary of the first permanent English settlement in the United States, on the James River some thirty-two miles above its mouth. Their determination had its fruition in the Jamestown Tercentennial Exposition on grounds fronting on Hampton Roads. All nations had been invited to participate; and their men of war began to arrive in April, many of which were there off and on during several months, entailing a great amount of saluting, official visiting and illuminating ship and exchange of courtesies, such as dinners, etc.

April 26 was the anniversary of the arrival of the English Colonists in Chesapeake Bay, and the formal opening of the Exposition took place on that day. President Roosevelt arrived in the morning in the *Mayflower* and reviewed the entire international fleet, the ships being all full dressed, with yards or rails manned, and saluting with twenty-one guns. In the afternoon the fleet naval brigade was landed to take part in the parade and ceremonies, and in the evening all ships were illuminated. There were several days on which there was a parade, one being Georgia Day and another Virginia Day. On each of them the President came down from Washington to review the parade.

The foreign ships present included the British

First Cruiser Squadron, composed of the *Good Hope,* the *Argyle,* the *Hampshire* and the *Roxburgh;* the French ships, *Victor Hugo* and *Chasseloup Laubat,* under the command of Rear Admiral Thierry; the German cruisers, *Bremen* and *Roon*; the Japanese *Tsukuba* and *Chitose* under Vice Admiral Sir Goro Idsumi; the Italian ships, *Varese* and *Etruria,* under the command of the Duke of the Abruzzi; the Austrian *Sankt George* and *Aspern*; the Argentine *Sarmiento;* the Chilean *Ministro Zenteno;* the Brazilian *Riachuelo, Barrozo* and *Tamoyo,* commanded by Rear Admiral de Bacellar; the Dutch ship *Gelderland;* and others. Our "mate" was the British cruiser *Argyle,* with which we exchanged many pleasant civilities.

The presence of those foreign ships furnished at times a good stimulus. As an instance, the quick time in which the Englishmen made the flying moor was an eye-opener to us, with the result that our ships were spurred on, until we did about as well as they.

Partly in consideration of the probable number of parades during the period of this Exposition, and as a very excellent step toward organized preparedness for all contingencies, the Commander in Chief, Rear Admiral Evans, made a permanent detail of an officer to command the Fleet Naval Brigade upon all occasions of its landing, whether for ceremonies or for hostile operations; and I was the first so detailed. I took a considerable interest in that, and, with the Commander in Chief's approval, instituted several permanent regulations as to the uniforms to be worn, the general character of formations, etc. Utilitarianism was the keyword—no more cocked hats, striped trousers, and white gloves for the officers, but

service dress with leggings and canteens for them as well as for the men. That brigade of blue jackets and marines was an impressive-looking body.

On June 13, the Second Division went north, to Cape Cod Bay, anchoring off Barnstable as a rendezvous, and engaged in calibration and target practices, and the various exercises for which that bay offers exceptional facilities. After various short cruises and visits to different ports we joined the fleet in anchoring off Provincetown, where there were to be exercises at the laying of the corner stone of the Pilgrims' Memorial Monument on August 20.

The President, who arrived that morning in the *Mayflower* amid the customary salutes, made the leading address which was full of his characteristic fire, after which he was again saluted upon his departure. On the next morning the divisions separated.

During the march up to the site of the Pilgrims' Monument, there occurred a little incident which seemed to betray a bend in the President's mind. The Naval Brigade was landed to lend added dignity to the occasion; but I found that the streets of that picturesque, little town were not wide enough properly to accommodate a parade, and I had the entire Brigade deployed on one side of the streets leading to the site. When the President landed, I reported to him the dispositions that I had made, and added that, if agreeable to him, I personally should march, with one of the brigade staff, by his carriage. This suggestion he approved. The immediate approach to the site was up a hill. While trudging along near the carriage step, I heard the President's voice over my shoulder, saying: "Captain, you must have been training for something of this kind in those long

walks I have seen you take. I would like to get myself into the condition that you seem to be in." To that I replied that I had seen him do some good walking, too. He rejoined: "Yes, sometimes; but I wish I could get my Army officers to do as you do." I was impressed by the President's interest in the Army, as shown by his expression "*My* Army;" but the incident was still more impressively recalled to my mind some three months later when I heard of the order for all officers of the Army to walk fifty miles, or ride ninety miles, in three days once in every year. I felt strongly inclined to shun the company of my Army friends for a while; but the fleet started on a cruise around the world not long after that, and upon its return a year later a similar order was issued to the Navy.

All that autumn was passed in target practices of various kinds in Cape Cod Bay and tactical fleet drills on the Southern Drill Ground, and finally the docking and repairs and coaling preparatory to starting on the cruise around the world. Upon the last occasion of going to New York, for certain reasons I took a pilot, which was not my custom in any of our own ports. While passing in through the old Main Ship Channel I questioned the pilot about the new, broad Ambrose Channel that was being dredged. He seemed to want to put that aside and discountenance it, adding finally that anyway it was not half completed. It occurred to me that his manner indicated mostly the opposition naturally to be expected in a pilot to anything tending to make the navigation of a port easier; and I made up my mind to find out about that upon coming out. So when we came out, on December 4, upon arriving at the inner end of Ambrose Channel, I changed course and headed out

through it, without noticing that we had been delayed in leaving the yard and that dusk was at hand. I had the first two buoys, however, and got pointed right, verifying the compasses. There was no regular buoyage in place, and what small temporary buoys there were, visible only when close aboard, were all on one side of the dredged cut. I hugged this side, being forced away from it only once by an immense, hydraulic dredge used in the work. We got through and out all right.

Early in December the entire fleet that was to make the cruise around the world assembled in Hampton Roads.

# CHAPTER XII

## FLEET CRUISE AROUND THE WORLD

Trinidad—Crossing the Line—Rio—Argentine courtesy—Courtesy to Peru—Punta Arenas—Magellan Strait—Callao—Magdalena Bay—Target practice—Speech—California—San Francisco—Admiral Evans invalided—Acting appointment as Rear Admiral—Flagship *Wisconsin*—Bremerton Navy Yard—San Francisco—Honolulu — Auckland, New Zealand — Sydney — Melbourne—Port Albany—Passage to Manila—Fourth Division detached to follow at reduced speed—Manila—Passage to Yokohama—Typhoon—Yokohama—Residence in Tokyo—Amoy—Manila—Flagship *Louisana*—Target practice—Colombo—Smyrna—Speech—Gibraltar—Hampton Roads.

On the morning of December 16, 1907, the Atlantic Fleet, anchored in Hampton Roads, full-dressed ship. When President Roosevelt arrived not long afterwards in the yacht *Mayflower,* all ships fired the national salute of twenty-one guns and manned the rail and the fleet and division commanders and captains of ships all called on him.

The occasion was the impending departure of the battleship fleet for a cruise around the world, quite a unique event not only in our Navy, but in the navy of any country. Indeed, while unique, it was not so startling when made by the United States, as it would have been had the naval defense of any other country

made it, as few others would have cared to leave their shores unguarded. It would be difficult, perhaps, to answer categorically and explicitly some of the objections that were raised to the project. In considering the various views advanced, it is well to remember the advice that Prince Bismarck was credited with giving to the young Emperor when discharged from the post of Chancellor—"Never forget to take account of the imponderable." The principal objections that I heard voiced were the cost and the probable ill effects of diminished opportunity for target practices. The latter proved to be a mistaken anticipation, for, in spite of being so steadily at sea, the unremitting attention paid to subcaliber and dotter practices resulted in the records of target practice in Magdalena Bay, on the Pacific Coast of Mexico, being better than those before. The cost of transporting such large quantities of coal to the different parts of the world was considerable, but the evident increase in general efficiency, due to the enlarged experience and to acquiring "sea habit," was well worth it. Apart from that were the imponderable elements: the proving to the world, and to ourselves, that the fleet could betake itself to the uttermost parts of the sea and arrive there in all respects ready for any service; the stimulating effect, upon officers and men alike, of enforced absence from navy yards and the concentration of thought upon the fleet as a fleet; the respite from the unremitting toil of drills without a little spice in the way of varied scenes and novel experiences; the experience gained, familiarity acquired, and methods crystallized in the study of logistics and the operations of supply.

Still, cogent reasons were developed for not doing again the same thing in exactly the same way. The

great haste and rush, inevitable under the requirement to accomplish a certain vast amount in a certain time, especially during the latter part of the cruise, after leaving our Pacific Coast, resulted in fleet exercises and many exercises of the crews being greatly curtailed by the necessity of getting to the next port on schedule time, and all time in port was given up to liberty and coaling ship. The great haste had a bad effect.

It was an imposing array of ships under the command of Admiral Evans presented for review by the President—sixteen battleships, and the yacht-tender to the flagship, the *Yankton,* besides which there were some auxiliaries and supply vessels that did not always keep in company during the individual passages. When the sailing hour came, all got under way together and stood out in column, following the *Mayflower;* but, before reaching the Capes, the *Mayflower* sheered out and anchored, and each ship in passing her manned the rail and saluted with twenty-one guns. Once outside the capes the ships were undressed and formed in "Line of Divisions," and the cruise was begun.

It was a notable cruise, but not more so in its conception than in its revelations of friendly feeling for the United States on the part of every country visited. No selection had been made of friendly countries to visit, nor of ports where cordiality would be most confidently expected. Both hemispheres and all continents were included in the itinerary, and in every land the unfeigned heartiness of welcome was a source of gratification to all who were so fortunate as to be in the fleet at the time, and something we should all remember. To attempt a detailed account of the ports visited might mar the perspective of the

panorama that was unfolded; and yet, in the universal note of greeting, distinctive inflections presented the peculiar charms of varied climes and peoples.

The first of these varied climes and peoples to greet us were those of Trinidad in the town of Port of Spain; and certainly the peoples of that colony seemed as varied as is possible for the human race to be. The island has been said to be the most cosmopolitan spot in the world; and we could well believe it. There were an enormous number of East Indians, as the British had been importing them as coolies for many years; and there were still more blacks and mulattos of African descent, and Chinamen, and practically every known race except Japanese. As they all intermarry, except the East Indians, there should in time be a remarkable mixture of types.

I had been there before, in the *Albatross,* but without much opportunity to observe the shore folk.

The advance of the white armada across the Gulf of Paria, the changing of formation, and the anchoring simultaneously, furnished a new spectacle for that isolated community; and very soon we were the recipients of all possible courtesies. Sir Henry Jackson, the Governor, was untiring, and Lady Jackson was most pleasant and gracious in dispensing the hospitalities of Government House, which was very large and suitable for the climate and for the dignity of a Governor. One day a number of us were invited to the Governor's luncheon at the racing stand; it was a typical English Colonial scene and most enjoyable, as were many other events.

During our six days' stay, beginning on December 23, not all of our time was passed in festivities. Changing latitude so rapidly made it necessary to

keep careful tab on the compasses, and each ship passed at least one day in swinging ship, for which the Gulf of Paria is quite ideal. Then there was the everlasting coaling ship. As our next passage was to be a long one, to Rio, each ship was anxious surely to secure a fair share of the coal present in colliers, and the flagship was probably pestered a good deal by signals and wireless messages. One ship that had been amusing the fleet by pertinaciously demanding more and more was finally squelched by the message, "You will get no more coal; we'll tow you to Rio if necessary."

Leaving the Gulf of Paria, the route of the fleet first girdled the southern half of our own continent. In noting the wealth of good feeling displayed throughout all those countries of Latin America, we felt that our way had been made smooth by that great American statesman, Elihu Root, who had completed his mission but a short time before. His straightforward tongue had proclaimed the new diplomacy, and his personality had won for us the love of those who were to be our hosts. Brazil had the first opportunity to sound the keynote of welcome; and one might think that the statesmen of that sister republic seized the opportunity to set a pace in hospitality not likely to be exceeded by those who were to come after.

Rio de Janeiro, the capital and the possessor of the superb bay, was naturally our first objective; and it was a two weeks' passage. While steaming to the southward and eastward toward Cape San Roque, bucking a two-knot current, those who had been to sea in the old sailing ships could appreciate very tangibly the former danger of being "backstrapped on San Roque." As it was, we just had to add, for several days, some fifty miles a day to be

steamed. There was one difficulty, however, with the new era ships, beyond which we had not entirely passed; the older ships, and even some of the newer ones, continued to be subject to disarrangement of the steering gear to such an extent that the Breakdown pennant was constantly in evidence in one part or another of the fleet. After some days, the Commander in Chief, apparently not liking to see ships irregularly out of formation, had each ship that reported not under sure control take position between the two columns in which the fleet was usually formed; and very shortly we began to call that position the "observation ward." The *Virginia* was singularly exempt from that difficulty; as a matter of routine we used to shift control and steer twice a day for some twenty minutes either from the central station or the steering engine room, in clear weather or in fog, in line, in column, or alone, without any other ships having occasion to know anything about it.

When the equator was reached, the men had an uproarious time, King Neptune coming on board to initiate all the unfortunates who had not crossed "the Line" before. His Majesty, Neptunus Rex, came on board at about nine o'clock, all hands being at quarters to do him honor and then being marched aft to the quarter-deck to receive him and the Royal Household, composed of some twenty of the most fantastically gotten up personages I ever saw. His Majesty (Chief Boatswain's Mate Macdonald) descended from his chariot, the foundation of which was undoubtedly a pair of coaling trucks, shook out his long, tawny beard, brandished his trident, and roared out to me, as he put out his hand, "Glad to see you once more in my realm, cap'n, and glad to see you looking

so hearty." "I thank Your Majesty," I replied, "for your welcome; and I'm glad to bring a lot more of American sailors to swell the lists of your subjects." "I suppose some of these sailors are strangers to the realm?" "Yes, Your Majesty; there are many that know more about haystacks than about seaweed." Whereupon His Majesty gave a demoniacal scowl around and growled in a fearsome basso voice: "They'll be absolved of that before I get through with 'em." Then the party marched forward where all preparations had been made. There was an immense tank rigged up of an awning wherein some ten most horrible-looking demons awaited the victims; and the barbers were in waiting around a tipping chair, on a platform above it, one with a tub full of lampblack and soft soap, and the other with a razor made of a barrel hoop. Every officer and man had then to appear before His Majesty and give satisfactory assurance that he had visited the Realm before, or be shaved and tumbled into the pond where they were unmercifully ducked—all with an accompaniment of most amusing stunts. Officers could "see the secretary" and under his protecting hand ransom themselves by signing for beer; two of them, however, goodnaturedly submitted to the initiation.

That sort of thing was good for the ship. Every one of those novices began to think himself a horny-handed mariner, and with that self-appreciation there would be born a growing idea of making good.

On January 12, we were heading in for Rio, and upon our approach the Brazilian men of war, the *Barroso,* the *Tupy* and the *Tamoyo* stood out and saluted Admiral Evans with thirteen guns, and then turned and accompanied us into the harbor, where

there were seven other Brazilians besides the German *Bremen* and the Italian *Puglia.* Here we got the first inkling of what was in store for us throughout the cruise: official visits which were, of course, entirely perfunctory but considerable consumers of time, and then the entertainments and diversions of various kinds, all of which were most enjoyable and most thoroughly appreciated. The one little fly in the ointment was that, with such short stays in port and such extraordinary duties as courts-martial and boards of various kinds, especially for the higher officers, there was very limited time available for ordinary shoregoing.

One of the leading functions was a banquet in our honor at Petropolis, a residential town for the well-to-do classes up in the mountains at the head of the bay, where the President's residence and the American and other embassies were located. We were taken up the bay in the little, paddle-wheel presidential yacht, which gave us a good opportunity to see how beautiful that bay is, an experience that had not come to the *Benicia's* officers thirty-eight years before. Nowhere in the world had I seen such a jumble of mountainous masses—some almost needlelike peaks several thousand feet high, a great many "sugar loaves," cliffs and deep ravines, all near enough to be in plain view, and the bay studded with islands of all kinds, rocky, wooded, and cultivated. At the head of the bay we boarded the inclined railway that was to take us to Petropolis, some two thousand, six hundred feet above the sea. It was a very steep ascent; and, being unaccustomed to it, we speculated on what would happen if cogs were to break and brakes fail. We also noted a curious sort of delusion: when we caught a glimpse of the plain and the sea, they

appeared tilted as if the sea would run over the land, caused by our being tilted so much more than we could accustom our senses to.

The banquet was very handsome, and the address, in French, by our ambassador, Mr. Dudley, very felicitous. The Minister of the Navy made a speech in reply which, however, was in Portuguese; we could only note that it was friendly and well delivered. The cool, invigorating air up there was most refreshing and made it easy to understand the artificial growth of the place.

We entrained the next morning at half-past seven and reached our ships at about eleven, with orders to shift immediately into white service dress to take breakfast with the Minister of the Navy at the top of Mount Corcovado, over two thousand, three hundred feet high, overlooking the city and bay. That would have been a pleasantly cool change from the ship, but as I was to report on a court-martial at ten o'clock that morning and on another at half-past one that afternoon, I had to decline. The same duty interfered with my having another trip to Petropolis to attend a garden party at the embassy; and I was beginning to fear that I would have no opportunity to see the city in its present, improved condition. The opportunity did come, however, one day as the admirals and captains drove through the streets on our way to and from the Ministry of Exterior Relations, where we were received by the distinguished statesman, Baron Rio Branco.

The one great recent change in the city, brought about by carefully considered governmental action, was the construction of the Avenida Central, a broad and imposing avenue with a line of ornate lamp-posts down the middle, carrying clusters of electric lights.

We were told that the Government had condemned enough land to form it and to provide suitable building lots on each side, and, after finishing and paving it, had sold the abutting lots at so advanced a price that the entire cost of the avenue was defrayed. We found it bordered throughout its length by handsome buildings. By contrast the old streets seemed very narrow, but gave an impression of order and neatness. One peculiarity was interesting to note: the people had been so accustomed to walking in the street that they made no difference in that broad Avenida Central but swarmed all over it, entirely neglecting the handsome sidewalks which were in many places paved with fanciful designs in mosaic.

A final, grand entertainment in our honor was a banquet of over five hundred guests, given by the Minister of Exterior Relations. It was held in the Monroe Palace, a handsome building originally erected at the St. Louis Exposition in 1904, and named after the author of the Monroe Doctrine. It was reërected in Rio afterwards. Very superb in its vastness, roominess, brilliancy of illumination, and beauty of carpeting, it was apparently reserved solely for such occasions, being situated on the shore looking out over the harbor, at the south end of the Avenida Central.

Amid all the magnificence attending the cordial welcome extended to the officers of the fleet, the way the city authorities provided for the comfort and welfare of the men was a marvel of happy thoughtfulness. A large hall was opened near the quay for a bureau of information, with tables and paper for writing, a money-changing office, and attendants well informed on every subject about which they could ask. I had never seen anything so well arranged.

There were four thousand men ashore every day, and no trouble whatever.

January 22 was the day finally fixed for sailing, and President Penna came afloat in his yacht, to visit Admiral Thomas, commander of the Second Squadron, upon whom devolved all duties of that nature during Admiral Evans's painful rheumatic troubles. The moment the yacht appeared, all ships were full-dressed, and fired a national salute and manned the rail. The President then proceeded to Fort Villegaignon; the fleet got under way and, escorted by the *Deodoro* and the *Tamandare,* passed in review before him there, each ship firing another national salute in passing, and stood out to sea. The ardor was a little dampened by a tremendous downpour of rain during which we could hardly see our neighbors in column. There were no accidents, however, and we could only regret that so much of our handsome bunting was torn and ruined. But the weather cleared; and the pleasant last look at that beautiful bay was in keeping with our thoughts of the friendly hospitality emanating from its shores.

Long and rapidly succeeding voyages followed our departure from the waters of Brazil, ending for the moment upon reaching our own Pacific Coast. There was much truth in the comment sometimes heard to the effect that to the officers the major interest in those voyages was professional. It was well if that were the case, although the principal reason upon which it was founded was the mere fact that there was more time passd at sea than in port and that, especially for the division commanders and the captains, so much time was taken up with the official ceremonies and entertainments that there was little opportunity for anything else. Indeed, leaving out

of account the weeks passed at the various yards on our Pacific Coast for docking and overhauling, the same comment applied throughout the entire period of the world cruise. As for the time at sea, the sea service was none too much; many changes had been made among the captains and other officers of the fleet before leaving Hampton Roads, as many had been having the experience long enough to warrant detaching them and replacing them by others who had not had the opportunity. And few there were in that period of our fleet development that would be making a second battleship cruise—that is to say, a battleship cruise *in fleet,* which is a material distinction.

The difference in the nature of parts of the eastern and of the western shores of the South American continent was curiously revealed in the circumstance that, while shallowness of channels forbade the big ships from entering the harbors of one country of the eastern coast, the excessive depths off a metropolis in about the same latitude on the western coast prevented the fleet from anchoring there.

The country on the eastern coast, thus handicapped by shallow channels, was Argentina; and no invitation could be sent to the fleet to enter its ports. But the situation gave to that country the opportunity to extend a courtesy of unprecedented grace; a squadron was despatched to the high seas to intercept us and salute the flag of our commander in chief as we passed, and it must be said that this was done with a skill and an exhibition of good sea manners that left nothing to be desired. While we were still at Rio the Argentine Navy Department asked Admiral Evans what would be his probable course and the approximate time of his arrival off the Rio de la

Plata, all of which information was given as nearly as possible and care was taken to conform to it. As the time approached for the probable meeting, bad weather interfered seriously with the navigation of those Argentine ships groping for us, their position being determined only by dead reckoning; but by a little wireless telegraphing, and by our ships all turning on their after searchlights at a high angle, they appeared some miles astern of us one evening, quickly closed with us (their ships making fourteen and a half knots), and then kept their distance during the night.

The next morning the formation of our fleet was changed from Line of Divisions (each division being in column, and the leaders in line) to single column. At the same time the Argentines, in column, increased speed and slowly passed. Their flagship, the armored cruiser *San Martin,* upon approaching the *Connecticut,* at the head of our column, saluted Admiral Evans with seventeen guns, being evidently determined to err on the courteous side and assume that the commander of such a naval force must be a full admiral. That was returned gun for gun; and then the *Connecticut* fired a national salute, with the Argentine flag at the main, intended as a recognition, addressed to that country, of its courtesy in directing the friendly demonstration. As the ships passed, the band of each one played the national air of the other squadron; the rails were manned; and the ships cheered ship. The scene was enlivened further by the color contrasts; the Argentine ships being of an olive green color with the crews dressed in white, while our ships were white with the crews in dark blue.

The manner of ending the ceremony elicited more

favorable comment than any other feature. The Argentine ships were in column, one thousand yards apart; their leader was slightly ahead of the *Connecticut,* and, although their port was well astern, they sheered off individually to the westward, each ship performing "right oblique." In that way, without turning their backs on us, they gradually diverged; and when about hull-down they went off in column to the northward and westward. Obliquing is an evolution that is apt to produce more raggedness than any in the signal book; and the way those ships maintained their distance and their bearing was delightful to watch.

Valparaiso, in Chile, was the Pacific port in which the depths are so great and the anchorage ground so limited that our ships could not be accommodated; but it was our turn, then, to grasp an opportunity and extend a delicate courtesy. It was arranged that our fleet should enter the bay, circle around in it, and pass in review before President Montt. Details were arranged through the Chilean Admiral Simpson, who had greeted our entry in Chilean waters at the Magellan Strait in his flagship, the *Chacabuco,* and had accompanied us up the coast from there. Toward the end of the passage the speed was so regulated as to be off the headland of the harbor at about two in the afternoon. The *Chacabuco* led in, with three large torpedo boats inshore of us, ready to warn off any sightseeing craft that might come too close. There had evidently been great preparations for the occasion. Grandstands had been built on various eminences, and all unoccupied ground was black with people. As we approached the point we could see that the beach was thronged; and we suddenly recognized the word "Welcome," gigantic in

size, framed upon a grassy slope in living letters of white-uniformed sailors—a really unique and charming conception.

In single column we stood in astern of the *Chacabuco,* emerging from lowering weather into bright sunshine when abreast of Fort Valdivia, all ships dressed with the American flag at the peak and at the fore and the Chilean ensign at the main. When well inside, following the motions of the flagship *Connecticut,* all ships fired a national salute simultaneously, which was returned by the fort. The training ship *General Baquedano,* flying President Montt's standard, was moored close to the inner shore of the roadstead; and the fleet swept around close to the shipping anchored on the restricted anchorage ground and passed in review, each ship in turn firing the national salute while its band played the Chilean National air. At the last gun the dressing flags were hauled down; the *Chacabuco* led us out to sea, then turned and saluted the American flag with twenty-one guns. This was returned by the *Connecticut,* which then signaled "Column, open order," "Speed ten knots," and we went comfortably on our way. Altogether it had been a successful carrying out of a happy suggestion; it was, also, a fitting companion picture to the greeting given to the fleet by Argentina on the other coast. Moreover, a special interest attached to the incident in the hope that it might go far to remove a certain exasperation on the part of the Chileans, dating from misunderstandings away back in 1891.

The most interesting episode in that voyage to the Pacific, if not of the whole cruise, was the passage of the fleet through the Magellan Strait. We arrived at the eastern entrance at the end of January, which

is about midsummer in that latitude, anchoring for the night in Possession Bay and moving on the next morning to Sandy Point, or Punta Arenas, which is also the name of the town there, the southernmost in the world, and the most remarkable aggregation of contradictions from the social and all other points of view. We had our first initiation in the consideration of the tides which form so important an element in the navigation of that narrow channel which connects two oceans and is swept by the conflicting currents set up by the widely different rise and fall at the two ends. Getting under way at four we caught the young flood which kept with us almost throughout the run of about eighty miles. As in some of the reaches in that region the current runs at the rate of from three to six miles an hour, it is a matter of some importance to catch a favoring tide.

At Punta Arenas we found the friendly hand of Chile extended and awaiting us, Admiral Simpson having come in the cruiser *Chacabuco,* bringing with him the American Minister to Chile, Mr. John Hicks. An anchorage for the whole fleet had been cleared on the narrow bank of soundings fringing the shore, and a naval officer met us some ten miles away, and, boarding the *Connecticut,* pointed out the exact anchorage ground. Even with that help, the greatest care was necessary, for the soundings drop off so quickly that an error of a few yards in position would result in the entire length of a ship's chain cable running out before the anchor would grapple the bottom; and most ships resorted to the practice of easing their anchors down, even if sure of the depth, instead of just letting go.

The town of Punta Arenas proved to be a most surprising place, all of one's preconceived ideas of

it being wrong. It had been growing only seven or eight years, in consequence of the discovery by the Chileans that all that immense, and heretofore desert, region was well adapted to the raising of sheep; and the place was booming. From a distance it presented a remarkable, mosaic appearance of white specks which proved to be houses of galvanized iron, glistening in the sun. The population was said to be about ten thousand; but there seemed to be much more of civilization and refinement than in our own frontier boom towns. The difference in that respect is natural, however, being brought about by the difference in the conditions of settling. The Consul's two-story house, where a ball was given, was really handsome in interior finish and furnishing—tasteful hangings and carpets and electroliers; and the grounds were well laid out.

Admiral Simpson and the Governor and others held banquets and receptions in our honor, and return was made on board various ships. Admiral Evans who, unfortunately, had been laid up a good deal, was quite ill in this port with inflammatory rheumatism and unable to take part in the social doings, so all that sort of thing devolved upon Admiral Thomas there as it had in Rio. Admiral Evans retained a complete grasp of everything professional, however; one afternoon during a reception on board the *Connecticut,* I went up and sat with him for a while in his sea cabin, and he commented upon many things and asked me if I had noticed such and such a thing, all of which I surely had and had wondered if he had.

Upon leaving Punta Arenas, the passage of the fleet of big ships through the Strait was a peculiar problem and liable to be fraught with serious dan-

ger in case of fog or of any individual breakdown. There could be no stopping or slowing to make out landmarks. With only two hundred and fifty yards of clear water between ships all had to stand on at the uniform speed ordered, whether those ahead could be seen or not. The peculiar difficulty, from a mariner's standpoint, was, not that there was not enough water but that there was too much. In one or two places the depth is sufficiently reduced throughout a small area for one or two vessels of moderate size to anchor; but a fleet like ours would drift about with their anchors hanging out at the full length of their chains without being able to catch the bottom before themselves striking on the rocks. Associated with this boldness underwater is naturally an environment of tumbled masses of mountains, two thousand to four thousand feet high—occasionally huge masses of gray rock, sometimes entirely bare, sometimes partly clothed in rough bushes and underbrush, sometimes bearing dark, somber trees, with patches of snow everywhere, while some of the crests two or three miles inland and considerably higher were completely snowclad. Glaciers we also saw, close at hand, the cold blue of their ice seeming to accentuate the chilliness of the blasts that came down from them. All through that dark autumnal (although actually midsummer) day, as the clouds kept up their ceaseless and erratic surging, little patches of sunshine would dance uneasily about with wonderful effect, especially when striking the dark water frequently lashed to foam by the fierce squalls. The ever-changing picture was one of rugged beauty, attaining at times to grandeur, and all the more impressive in the restricted framing, the strait being

only from one to two miles wide. To some merchantmen that we met coming eastward the spectacle must have been additionally striking, with the sixteen big white battleships, three auxiliaries, five, dark, sinister-looking destroyers disposed on the flanks, and the graceful Chilean cruiser leading the way.

A compelling feature in the passage through the Strait is that it must be done in one day, there being no shore lights westward of Cape Isidro, forty miles from Punta Arenas. To secure all the daylight available, the departure from that light had to be taken at daybreak and to that end the ships got under way at eleven in the evening, glided noiselessly into position and steamed away in column at the standard speed of ten knots. That rate of speed was nicely calculated to carry the fleet through and out past Cape Pillar into the Pacific by dusk, and it just did it. I confessed to myself that, had I the responsibility of it, I would have been inclined to give myself the comfortable ease of mind obtainable by setting the speed at a trifle more than ten knots; but ten knots was the economical speed, a vital consideration in beginning a long sea passage, and there was no lack of nerve on board that flagship.

When the big ships debouched into the Pacific the torpedo flotilla kept inshore and stood up the coast through inland waters. Not the least thoughtful act of the Chilean Navy was the offer to have an officer who was familiar with the recently surveyed channels inside the chains of islands extending northward from the western entrance to the Strait, go in one of the destroyers to pilot them all through the unused channels some three hundred miles farther than was known to the ordinary seagoing public. His knowledge was a great boon to those little craft and saved

them many hours of strain in the heavy South Pacific ocean swell.

To enter the southern part of the South Pacific was to enter a region of boisterous seas and, near the continent, of persistent fogs. The never-ceasing gales that pursue each other round and round the world in the 40's and 50's of the southern seas, in one continuous sweep, unbroken except by the one projecting point of South America, give little respite; and the perennial currents, caused by the varying winds as more temperate climes are reached, bringing warm water into cooler air and cold water into warmer air, produce conditions fertile for fog. There was no exception to this condition during our passage north, and there was good experience gained under the easiest possible conditions; what made the conditions easy was the absolute loneliness—that region being isolated from all highways of commerce. One ship in a fog, away from trade routes, has little to worry about; a fleet similarly situated has no particular concern, having only its own units to look out for; but when a fleet encounters fog in a trade route, or in a congested approach to a populous region, then there is indeed need for watchful care and cause for anxiety. This was very particularly the case before directional radio had come to help. But the region that the fleet traversed was most lonely; and before long we had settled down to a formation best adapted to that condition—column of divisions, which is to say, ships of each division in line, and the various divisions astern of each other at full interval apart. Of course, even in the comfort of that formation, men handling ships must be seamen; it may not be until some untoward accident betrays the lubber, but such betrayal is liable to come at any moment and it will

then be too late to regret not having a seaman at the conn.

Pausing only to bow, as it were, to the President of Chile, in the roadstead of Valparaiso, we plodded onward to fairer weather and Peru. Certainly creature comforts added a more rosy tinge to existence. For one thing it seemed suddenly to come home to me one day what a vast change had come over the possibilities of the table at sea. In contrast with the hard-tack and soup-and-bully of twenty-odd years before when ships were small and cold-storage rooms unheard of, I mentioned in a letter home that, with some of the officers dining with me, I could offer them a fish from Trinidad, a goose from Punta Arenas, a quail from Rio, and wines received from Gibraltar at Punta Arenas.

Peru is fortunate in having a port where the largest fleet can anchor, namely, Callao; and no possible vehicle of greeting was left unharnessed during our stay there. The day of our arrival was declared a holiday and people flocked, even from Lima, seven miles away, to see the ships come in; and, though they probably did not know it, those people were treated to an exceptionally pretty bit of work. The approach was made in Column of Divisions, with quarter interval, which formed a compact and perfect square; and the precision of movement and the correct position of every ship, when the anchors dropped simultaneously, formed an eloquent exposition of the value of the recent sea training. It is to be observed, too, that the Breakdown flag had come to be very much less in evidence than in the earlier part of the cruise.

The usual, official courtesies were quickly exchanged, after which the entertainments actually in-

cluded a bullfight, which was witnessed by some thirty-five hundred men from the fleet, besides officers, and many functionaries and members of the high society of Lima. There were no horses injured, the riders being wonderfully expert and, as we were given to understand, the President having commanded that the horse-goring feature should be omitted. Conducted in that way it cannot fairly be said that the sport is a cruel one; the bull is in fighting mood and not suffering from the fear of death, and he is instantly despatched by a picador upon falling; the usual, peaceful death by being slaughtered for food does not seem to be materially different. One toreador tripped on his flag and was tossed, but as he walked out he could not have been seriously hurt, although there was some blood on his leg. One of the prettiest exhibitions of skill and activity was made by one of the matadores with a vaulting pole; as the bull rushed at him he ran toward it and, planting his pole in the nick of time, vaulted over it. It was a fine sight to see the superb animal charging right and left, pawing the earth, and bellowing, and the blasts from his nostrils striking the ground and raising clouds of dust. There were six bulls killed, all fine animals; and the flagmen (*banderilleros*) and the dart men (*picadores*) and the matador were splendidly built and active.

On the night of Washington's Birthday, President Pardo entertained the officers at a banquet given in the grand hall in the exposition grounds. I was so impressed that I wrote home in especial praise of the appointments, cuisine, wines and service. The President's address of welcome was also stirring and elicited much applause, as did also Admiral Thomas's felicitous reply. The American Minister,

Mr. Coombs, and Mrs. Coombs, also gave a most enjoyable garden party in our honor. There were many other entertainments of various kinds, including a very pleasant dinner with the Consul-General and Mrs. Taylor.

I was sorry that circumstances prevented me from joining a party that went as guests of the Government on an Oroya railroad trip. Never having been there before, I was keen to make the ascent and test the "mountain illness"; but fleet special duties were such that I did not get on shore except for three official or quasi-official functions.

The last festivity in Callao was a dinner on board the *Connecticut* to President Pardo. I was seated between the Minister of the Navy and the Minister of the Interior. They could speak no English, of which I was very glad, but they were very pleasant and easy to talk with. I mentioned that it appeared to me that the language spoken by Peruvians was a purer and more correct Spanish than that spoken in other Latin-American countries, and the Minister of the Navy replied that I was undoubtedly right. I had prepared a short speech in case opportunity should offer, but for a certain reason decided not to ask the privilege.

February 29 was the day set for sailing. Fog bells were ringing in the morning watch, but it cleared off soon after eight and conditions were perfect for the program that had been arranged. President Pardo boarded the cruiser *Almirante Grau,* and the fleet dressed ship and fired a national salute. The *Grau* proceeded to a point off Cape San Lorenzo, where she stopped, and the fleet passed in review, the ships firing a national salute and manning the rail in succession.

That ended festivities and functions for a while, as our next port of call was to be Magdalena Bay, in Mexico, where it was to be "early and late" for a month, the Mexican Government having given its consent to the fleet holding target practice there. That is a remarkable sheet of water, spacious, land-locked, deep enough for safe maneuvering, with anchorages everywhere, and situated in a desolate, barren region that offers no inducements to any one to come there and meddle with the sport. During the month there Sundays were not holidays, as there was great hurry to get us to California and in the hands of the hospitable people of The Coast. By dint of desperate haste, the program of target practices, such as we had in those days, was completed by April 11, and the records were good; but I think all recognized that the training of the crews in other ways than those that were possible in so short a time was sadly deficient. There is no doubt that the great hurry attending such extensive cruising had its ill effects.

In the matter of the target practices, the *Virginia* never won the Gunnery trophy, but never did badly. Her gun-pointing and sight-setting were excellent; we broke the records with the 3-inch, and our 6-inch, in spite of some penalties, beat everything in the Atlantic Fleet but not the *Maryland* in the Pacific Fleet. The trouble was that we were constantly being penalized, very properly, for mishaps and delays that were attributable to some error. As an instance: at the first 6-inch shot fired, the plugman standing by to open the breech stood too close and the breech of the gun in recoil knocked him over. The umpire called "Silence," and the man was removed, not badly hurt. Then the firing began again,

but as something had happened to check the fire the penalty had to be imposed. That same battery had another penalty due to a gun not returning to battery after recoil, simply because of there being too much paint on the part that enters the sleeve.

The little Mexican gunboat, *Tampico,* was the only visitor during our stay in the bay, and her officers exhibited the liveliest desire to extend some positive welcome, which culminated in a banquet on board that little craft, given by the Governor of Lower California. It was a modest affair, naturally, but none the less markedly imbued with a spirit of friendliness; at the same time, the difference in language between guests and hosts was a handicap. In view of this, and the conditions being in a measure different from those that deterred me from making a speech at Callao, I tried to help matters along a bit by delivering an address in Spanish which was very pleasantly received. I began:

"Excelentísimo Señor Gobernador,

"En nombre de los capitanes y demás oficiales de la escuadra del Atlántico, ruego el honor de aprovechar esta oportunidad para manifestar á Vuestra Excelencia y al pueblo Mejicano la complacencia con que nos hemos hallados ser recipientes de deleitosas manifestaciones de simpatía y cariño desde el momento de nuestra llegada en aguas Mejicanas."

What I had to say, however, may be more interesting if I give the translation:

"Most Excellent Mr. Governor,

"In the name of the captains and other officers of the Atlantic Fleet I beg the honor to avail myself of

this opportunity to express the gratification that we feel at finding ourselves the recipients of delightful manifestations of sympathy and affection from the moment of our arrival in Mexican waters. We owe it to the friendly attitude of the Government of Mexico that we are able to hold here our target practices so necessary for the maintenance of a proper condition of military efficiency, which I am very pleased to think will always be available to help in assuring the well-being of our neighbor and friend.

"From most remote times it has ever been recognized that the relations existing between governments borrow form and color from those that characterize the occasions in which individuals representative of the two countries meet. Looking at this subject at the present most agreeable moment, we should feel the greatest pleasure in recognizing that during more than a half century of our national lives, holding principles and institutions almost identical, the political relations have ever been most cordial; and, furthermore, those relations have their foundations in a friendship truly *simpática* as well as traditional.

"Not possessing with fluency the graceful idiom of Mexico, I lack words adequate to express the sentiments of affection that move us; but I am sure that our courteous hosts will be able to supply what is lacking, assuring yourselves, gentlemen, that each one of these acts of good will does not fail to penetrate deeply and take root in the fertile soil of our hearts.

"I now beg the honor to propose a toast. Let us raise our cups in honor of the Señor captain of the *Tampico.*"

Having been on the bridge from five o'clock in the morning to six at night on that day, afterwards going three miles in a steam launch to the banquet, and having to be up at five on the next morning for a similar day's work, I did not tarry a moment longer than was necessary on board the gunboat; but it was not so late a party as it would have been in a larger vessel.

A month of such work as had to be accomplished in Magdalena Bay made it a great relief to get to sea for a few days; and in the three-day passage to San Diego, where we arrived on April 14, we became somewhat rested and ready for the duties of a different kind that were awaiting us. Then, during an entire month, we had occasion to understand and verify what had always been said of the open-handed, open-hearted hospitality of The Coast. At San Diego, after having been banqueted, in company with the Governor of California, we landed the Fleet Naval Brigade one morning, using our own resources in the way of boats to accomplish the long trip up to town. It was an evolution in which I had had opportunity to practice most of them, and that flotilla of boats, all in tow of their own steam launches, and carrying about four thousand five hundred men, presented a very attractive appearance. It was an all-day affair, the last of the units not getting back on board until nearly eight in the evening.

San Pedro, Long Beach, Santa Barbara, Monterey, and Santa Cruz were all visited, and at each we were welcomed most royally, and in turn did what we could in the way of illuminating ship, working searchlights, and so on.

On May 5 the fleet arrived at San Francisco, completing the first leg of the cruise which it had been

decided by that time would be continued around the world. We found the Pacific Fleet of armored cruisers there—the Second Fleet as it was called, and upon anchoring we full-dressed ship to conform to what was going on in honor of the Atlantic Fleet's arrival, illuminated ship that night, worked the searchlights, etc. A big parade had been decided upon, to comprise the Naval Brigades of the two fleets, and the landing was begun at a quarter to seven, the line of march not being taken up, however, for a couple of hours after that. There being seven thousand five hundred men in the two brigades, I had to allow some time to get them all on shore and formed. The greeting throughout the line of march was most spontaneous and enthusiastic, making it a real pleasure to the marchers.

After that there was an uninterrupted succession of banquets, automobile drives, a review of the fleet by the Secretary of the Navy, a brigade landing at Oakland across the bay, salutes, dressing ship, illuminations, etc. Coming so soon after the terrible visitation of fire, the energy and cheerful hospitality of the city were wonderful.

On May 9, Admiral Evans had to give up, haul down his flag, and go home, carrying with him the sympathy and admiration of the fleet for his fortitude under his sufferings. He was a fine seaman and a bold commander in chief, possessed of qualities that I hope will not soon be lost to memory. It was good to be his pupil.

Other changes had now to be made in officers and in a few ships. Rear Admiral C. S. Sperry, who had commanded the Fourth Division, succeeded to the command of the fleet and First Division, Rear Admiral W. H. Emory fleeting up to the Third Divi-

sion. The detachment of Rear Admiral Thomas, as well as of Rear Admiral Evans, left two vacancies in division command, which were filled by the assignment of Captain Wainwright and myself to those commands, with temporary appointments as Rear Admiral. That took me out of the *Virginia;* and when Captain Alexander Sharp relieved me of the command, I could only find comfort and pleasure in the assurance of the ship being in able hands.

In the new assignments the Fourth Division came to me, with the *Wisconsin* for flagship, my regular promotion following on July 19. Casting about for a flag lieutenant, I was so fortunate as to find present in the fleet Lieutenant (now Captain) T. T. Craven, who, as a midshipman, had been my aid when I was Executive of the *Massachusetts.* He accepted the duty and remained with me during the rest of the cruise, also returning later as Fleet Ordnance Officer for the latter part of the period when I was Commander in Chief, thus completing three periods of close, personal association with all that that implies.

I was glad that, just before these changes were made, orders had come from the Department approving certain recommendations that I had made concerning the organization of the fleet, the principal one being that squadrons (composed of two divisions) should be units in only a tactical sense and for tactical purposes, the division being an independent administrative unit under the Commander in Chief. Much time and labor were saved by cutting out that one wholly useless step in correspondence.

The *Wisconsin* had been in commission only about a month, with no opportunity to shake down. But I was struck with the appearance of the crew which

seemed to show more maturity than had been observable during the earlier development of the new type of seaman. During the years immediately preceding the commissioning of the *Virginia* the enlisted *personnel* of the Navy seemed to have reached a low ebb in actual efficiency, despite the excellent material of the recruits. Every succeeding year was bound to bring improvement, especially as there was a constantly increasing leaven of reënlisted men. Starting with a crew that was immature but of excellent stuff, the officers and petty officers of the *Virginia* had quickly brought the ship to a fine condition of efficiency. Captain Sharp was good enough to write to me not long after relieving me that "she seems in the way of organization and efficiency, to be about as near perfection as it is possible for a ship to be."

The fleet had to put up with a couple of months of navy yard cruising to prepare for the rest of the voyage around the world. The *Wisconsin,* with several others, was sent to the Bremerton Navy Yard, on Puget Sound, where work was begun promptly on our arrival.

I had heard a good deal of the Sound country and in pleasant terms which I found not misplaced. The summer is generally very dry; but during the month that we were there we did not suffer from lack of rain nor from too much rain, it being between seasons. Many seemed to think that we were favored with conditions much above the average, which is not often the view taken by residents. The outlook is most picturesque and attractive. From the steps of one of the houses there was pointed out to me the snow-clad peak of Mount Ranier away in the distance, and the long crest of the Cascade range was

also visible to the eastward. The immediate region of the Sound itself is really beautiful; the stretches of water are quite tortuous, and the wooded headlands and promontories give the effect of a great island-studded lake. A ship approaching the Navy Yard is first seen when emerging from behind the pines and evergreens of a point of land; and all throughout there are pleasing vistas, with a sail or a steamer framed in them, and woods everywhere close down to the shore.

To a person fond of tramping in the country, the place was quite an elysium, trails or dirt roads in good condition leading off into and through pine woods and offering fine pastime for leisure hours. During the greater part of our stay other ships of the Fourth and other divisions were there, and there was no eating of the bread of real idleness. Indeed, certain conditions brought about probably, in part at least, by the isolation, made official life a little troublesome at times. But personally, the officers of the Yard were pleasant, and their households hospitable. I had more leisure there than I had ever had before or than I have had since, and I was able to explore the neighboring forests quite thoroughly —once or twice, indeed, more thoroughly than was wholly pleasant, having become lost in a primeval and almost impenetrable jungle.

During the fleet's stay in Pacific Coast waters there was presented to every ship a bear cub as a mascot. But few, if any, survived all the remaining long sea passages. My orderly had special instructions to see that my cabin door was closed whenever I went on deck; but one day, when closing the door, he failed to notice that little Teddy was in there, and that apartment was sadly wrecked, especially the

desk. One day on the passage down from Puget Sound, the little chap fell overboard and it was a case of "Man overboard" for the lifeboat's crew. They picked him up when he was well-nigh exhausted, and a cheer went up from the ship when the bow oarsmen was seen to lift him in over the gunwale.

On July 7 the fleet passed out through the Golden Gate, looking forward to long passages at sea. There were many changes in flagships, ships, officers and men. It was not an unpleasant prospect; those who had been in the fleet from the beginning of the cruise understood the full enjoyment of the professional work, and those who had just joined were keen for the experience that would be new to most of them. The Fourth Division, as finally reconstituted, comprised the *Illinois,* the *Kentucky* and the *Kearsarge,* the first being a low-quarter ship like the *Wicsonsin,* and the other two being of low freeboard forward as well as aft.

Advantage was taken by the Navy Department of the prospective presence in Honolulu of a number of officers of proper rank to form beforehand a Pearl Harbor Board, of which I was Senior Member, to study the ground at the proposed neighboring Naval Station and to prepare plans for the layout of the Station. That was interesting and pleasant in itself, and pleasant also in that it brought about enforced absences from the coaling wharf, where the *Wisconsin* was condemned to lie during the entire week in a stifling atmosphere of coal dust that made life well-nigh unendurable to those smaller ships that were necessarily assigned to that part of the harbor.

Apart from these trying details which one should forget, there were pleasant times during our stay in

Honolulu, the names of Governor Frear, Judge Hartwell, and former Governor and present Judge Dole always causing pleasant retrospect. Not all the ships, of course, were so unfortunately berthed; one whole division, indeed, was anchored in a roadstead off La haina, of another island, generally with water smooth enough to coal from colliers. Although somewhat isolated, they offered cause for envy.

When the news first reached the fleet, after arriving at San Francisco, that the cruise was to be extended to include Australia and New Zealand, besides Japan which had already been decided upon, it caused very lively satisfaction; and there was no diminution of that satisfaction as the voyage progressed. Opportunities to visit any part of that region have always been rare, and that of itself increased the interest. They came next after the Hawaiian Islands in our itinerary, the passage being one of seventeen days.

During that passage an incident occurred on board my flagship, the *Wisconsin,* which might well have caused a serious disaster and which did bring the extraordinary signal from the fleet flagship, "Fourth Division, badly done." There was no doubt that, without a knowledge of what had happened, the signal seemed well deserved. The divisions had been exercising independently and were coming together to rejoin formation. I was handling my division from battle stations, and was approaching obliquely on a line of bearing. When in proper position, I ordered the *Wisconsin* to go at half speed, and was just waiting for the speed cone to indicate that that was done, in which we would be followed by the other ships, before signaling to turn simultaneously into column astern of the Third Division. But the cone

did not come down, and I noticed signs of confusion about the conning tower. I finally learned that the mechanical engine-room telegraphs were out of order and the Captain apparently could not get word to the engine room to reduce speed, and the whole division, of course, accompanied us, butting into the other divisions at standard speed when they were going "slow." There was little time to decide what to do but we avoided disaster, and the matter was cleared up in the afternoon by the following signal to the *Connecticut,* which I sent by wireless to make sure the whole fleet would get it:

"The trouble at ten-six this morning was that communication between the *Wisconsin's* bridge and engine room was severed for some minutes just when I was about to slow and go ships right six points to fall in astern of the Third Division. Having that division on starboard beam and quarter and being forced to continue at standard speed, I thought it better to stand on for a while inside the proper interval from First Division, while messengers went down to get the engines slowed rather than head up at standard speed. I submit the Fourth Division was thus handled in such a way as to minimize danger, although it looked bad. If this meets your approval may I ask to have the signal 'Fourth Division badly done' expunged from the signal log. SCHROEDER."

The reply came promptly:

"Explanation entirely satisfactory. Signal, 'Fourth Division badly done,' is annulled and will be so stated in the record. SPERRY."

So that was all right. But we were all impressed with what might have resulted from the same small accident under different conditions.

Auckland, New Zealand, was our first Australian port; and we were quickly rushed through the ceremonials that every one recognizes as being not only proper but indispensable. The Prime Minister, Sir Joseph Ward, read an address of welcome from a pavilion near the landing place, presenting to the President of the United States a casket made of New Zealand materials entirely, and also a gift to Admiral Sperry. Then the President of the Harbour Board presented a gift with still another speech, all of which were acknowledged by Admiral Sperry in speeches notable for elegance of diction and delivered with an ease of manner that was very attractive. Then in a military hall there were more speeches, by the Governor, Lord Plunkett, and the Mayor; and the Auckland Orchestra Association, among whom we noticed a number of female violinists, gave us some delightful music. After a very delicious luncheon with the Mayor, in his handsome private establishment, we were driven in carriages to a field of review which was attended by the Governor and Lady Plunkett. The latter, being Honorary Colonel of a regiment of Rifles, wore the dark green uniform of that regiment, exact, except that she wore a skirt.

That first day broke the ice of conventionality. Many forms of entertainments followed, all carried out in a fine spirit of comradeship, and apparently with an eye single to the pleasure of the guests. There was one immense banquet, of course, presided over by the Governor, at which there was a great amount of postprandial oratory. A curious and sen-

sible feature of that entertainment was that the meats were cold, the difficulty having evidently been realized of serving them hot to seven hundred and twenty guests. The speeches were all very clever; Vice Admiral Sir Richard Poore, whose flagship, the *Powerful,* was in port, made a typical, straightforward, manly, English seaman's speech which all seemed to admire very much.

The hospitable program of events included an expedition to Rotorua, a famed geyser land with boiling springs, mud volcanoes, and all that sort of thing. There was also a special meet of the races at Ellerslie, about half an hour's drive out of town, where we were the recipients of very special civilities from his Excellency and Lady Plunkett. At luncheon I had an opportunity to chat with a delightfully vivacious lady, well known as not being very fond of Auckland and good-naturedly credited with saying that her epitaph should be, "Born in New York, brought up in San Francisco, buried in Auckland, resurrected in London."

There was, of course, ample provision made for the national entertainment of our men; and the whole town was *en fête.* All the principal streets were decorated profusely with banners and flags, the American being as plentiful as the English. Near the water front and man-of-war boat landings, the display was especially liberal, with a huge arch of greens bearing the sign *Mia ora,* which means "Welcome" in the Maori dialect. At night there was a great deal of illuminating, both afloat and ashore, the ships being illuminated from six to ten.

The only discordant note was in the disreputable conduct of a great many of the men on shore. It is only fair to say that they were not a really bad lot.

Their riotous behavior was largely due to the circumstances of the limited time in port being necessarily divided between coaling ship and liberty. The irresponsible ones, who had had little or no other experience, seeing themselves given the freedom of port after port, had come to consider the Navy as existing for them, with the result that the Commander in Chief, who had made a happy card of the *personnel* "who stand behind kodaks rather than beer bottles," had to issue a Special Order about it. Troubles of this kind had really begun in Honolulu, where it seemed that the fleet was getting in bad shape. But the trouble was not chronic.

While in these waters, an order was received from the Department, amending an unfortunate regulation which had required officers to "dress" for dinner at sea as well as in port; the amendment made the regulation apply only in port. I had twice made a recommendation that the change be made, pointing out the absurdities in the situation with all sorts of things being liable to be sprung in the evening, and officers naturally inclined to take off evening dress clothes before going to the bridge, or conning tower, or engine room, or turrets. I had written frankly to the Chief of Bureau of Navigation, Admiral Pillsbury, that the regulation was largely violated in effect if not literally, and such open violation had a tendency to breed contempt for the law. When the customs of the service, I urged, cannot be made to conform to a regulation, it is generally well to make the regulation conform to the customs. A similar principle may be applied in matters of national import. The order of amendment was certainly wise as well as welcome.

My first letter home from Sydney began:

"Sydney harbor (more properly Port Jackson) is without doubt the most beautiful harbor I have ever seen. I have heard it spoken of as a pretty place; but to me it stands preëminent, above Rio or Nagasaki or any harbor that I can remember."

Each day of the week that we passed there revealed additional beauties. The bay is not visible from seaward, the entrance being dislocated by the Inner South Head; and upon rounding that and opening the long, peculiar sheet of water, we were confronted with numberless irregular coves on both shores, separated by little rocky headlands on which the woods came down to the water's edge. While not over a mile or so wide, clean, deep water was everywhere. The Fourth Division was directed to anchor off the east point of Woolloomooloo Bay, which we reached by passing behind the little Garden Island, emerging into sight again after rounding it and anchoring in a semicircle. It was simply and truly a beautiful picture, or a series of beautiful pictures, from whatever direction viewed. Near the city the little projecting points were beginning to be built upon, and every house was a pretty gem without any signs of laying out in lots or anything to offend the eye.

Certain attractive features of the city were also in harmony with the harbor. An unusual number of fine parks, including an extensive review field, removed any first unfavorable impressions created by streets rather more narrow and irregular than expected and which gave a quasi old-world aspect. This aspect, really, was pleasing, especially in the absence of glaring sale signs for houses or plots of ground and other disfigurements.

The Governor-General of Australia, Lord Northcote, was in Sydney at this time, his duty being divided between there and Melbourne since the federation of the Australian States. He and Lady Northcote were very pressing in their invitation that at least two of our Admirals should be their guests in the Commonwealth Government House during the stay of the fleet. This was proposing a new departure, with visions of laxity in carrying on the routine of the fleet; but it was finally arranged that Admiral Sperry and I with our flag lieutenants, should take up our quarters there. A more delightfully dispensed hospitality would be impossible.

That Government House was a fine, old, stone mansion built in the 30's, very roomy, and with a large establishment carried on under the direct management of a Paymaster in the Navy with the rank of Captain—Mr. Share. That officer afterwards was flag secretary to Admiral Jellicoe in the World War. He was a pleasant man and evidently a man of ability and experience in keeping everything going right, including all matters of etiquette and precedence. The latter were sometimes a little perplexing and caused delicate situations, especially in cases involving Commonwealth and State government personages. We were made to feel that we were living in liberty hall. Lieutenant Craven and I would have breakfast early (and such breakfasts!) and get off on board for division work during the forenoon. After this we felt free to engage in any public or private activities suggested by our gracious hostess. Those activities were much varied in character and interest; Gymkana and other sports, including boomerang and spear throwing by some Queensland natives, and tree-felling contests; and

there was a review of some thirteen thousand troops, in which half of the fleet naval brigade took part. There was also a very pleasant afternoon tea at Admiralty House, by Lady Poore, wife of the Vice Admiral who had come from Auckland in his flagship.

The Governor of the Colony (New South Wales) was Admiral Sir Henry Rawson, a fine character and much beloved. At a reception which he gave I had the opportunity for a little chat with him about Malta and the ironclad frigate *Minotaur,* which he had commanded while I was there in the *Gettysburg,* and Navy matters generally. There were also receptions by the Lord Mayor and Lady Mayoress, and others. (In that part of the world they are very sensible about one thing; they go to balls, etc., between nine and half-past nine.) The most elaborate and grand entertainment was a reception and ball by Lord and Lady Northcote. An immense marquee was set up covering a large part of the grounds of Government House, divided into rambling walks, making a scene with quite unusual features. Unfortunately a rather heavy rain occurred in the early part of the evening; but it stopped after a while, and no one's spirits were at all affected by any rain that worked through the joints of the canvas. Among the guests were Sir Thomas and Lady Carmichael, who were to go on the next day to Melbourne to be ready to meet us, he having been appointed Governor of the Colony of Victoria.

Some returns for the various hospitalities were made on board the *Connecticut* and one or two other ships. Thus a week passed, and the time came to proceed on the schedule of passages. I gathered that to all it had been a pleasant week. Those who had been guests in Government House had had excep-

tional cause for finding it so; Lord and Lady Northcote's innate sense of true hospitality was charmingly evinced in the way they made us feel at home, with every moment pleasantly occupied.

Melbourne, at the head of Port Philip Bay, presented many contrasts with Sydney, particularly to seafaring men entering from Bass Strait. The bay is so immense that there are no points of comparison, except that at Melbourne people afloat suffer from the inconvenience of the ships having to lie well offshore because of the shallowness of the water and from there being no shelter for boat work with the wind in the south. But the spirit of welcome on shore was in no wise different.

On the evening of our arrival there was a dinner by the Governor and Lady Carmichael at the State Government House, well out of town, with a reception afterwards. It was with astonished interest that I saw some very rare historical relics that were in Lady Carmichael's possession—a seal ring worn by Mary Queen of Scots, the cap worn by Charles I when he was executed, some playing cards of Napoleon at St. Helena, and several others. That started the ball rolling. Addresses of welcome, receptions, luncheons, banquets, followed each other in rapid succession, while the decorations about the city testified to the care devoted to the occasion. Lord and Lady Northcote actually came from Sydney to attend a banquet in our honor.

A notable incident was a superb concert. The orchestra had one hundred instruments, and there were three different choral societies, aggregating nine hundred trained voices. The entire combination of orchestra and societies rendered such pieces as the "Overture" of Tannhauser, the "Hallelujah"

from Handel's "Messiah," and others. The hall was an immense one, there being eight thousand persons seated in the audience, besides the one thousand performers. When Admiral Sperry entered at the head of his officers all rose and stood while the "Star Spangled Banner" was sung. It is not often that one is so stirred.

I was very agreeably surprised while in these waters at receiving cards from several ladies who had been in Hobart Town, in Tasmania, at the time of the *Swatara's* visits in 1874 and 1875, and who remembered her and her officers very well. Having married and settled mostly in Melbourne, and seeing the list of officers published in the papers, they kindly notified me of their presence and change of name. I found time to have some pleasant chats with them over old times. What changes in naval life had come in those thirty-three years!

After leaving Australian waters the fleet was to go to Manila, and the route decided upon was naturally around southward and westward of the Australian continent, and up through Lombok Strait to the Philippine archipelago, rather than undertake Torres Strait north of Australia. That brought it about that we should touch at Albany, away at the southwest corner of Australia, seemingly the most out-of-the-way place in that part of the world. The very fact of its remoteness seemed a natural cause for a more than usually accentuated local patriotism, a sort of special pride of ownership; this found expression in a song of which the last line of each stanza, sung in resounding chorus, was:

"This bit o' the Footstool is our own."

The port of Albany is a rather small, almost land-locked, bay, rather shallow except where dredged; but the dredging had been carried on to such an extent that battleships could go in, five at a time, to coal, the rest remaining in the roadstead which is protected only from the westward. As the ceaseless round-the-world swell comes from the westward, the anchorage was comfortable enough, and seemed particularly so to the low freeboard ships of the Fourth Division after the passage from Melbourne across the Great Australian Bight. All that stretch of coast is rock-bound, if such a thing exists anywhere. Approaching diagonally, we passed, about sunrise, within a couple of miles of an island bearing the eloquent name of Breaksea Island. The heavy westerly swell, being a little diverted from its straight, onward course, did not strike it with full force, but the spectacle seemed none the less superb. The island is one hundred to three hundred and fifty feet high and almost the whole of it, after the ages of pounding, appeared like a huge, smooth bowlder; we would see one of those tremendous swells approach sullenly, and then an immense white mass would surge up fifty feet or more, solid, and the entire vicinity would present a broad cascade, while the diminishing mist could still be traced as the fresh breeze wafted it up and up. In a storm there can hardly be a spot not reached by it, not even the lighthouse three hundred and thirty-six feet in the air.

The town was a place of about four thousand inhabitants; but it was astonishing to what successful lengths they went to exhibit their good will. The people are much more frontierlike than in Victoria or New South Wales; the Premier, the Honorable M. J. Moore, was the Lieutenant-Colonel of the

17th Horse, and at a ball that was given he came in his military uniform and danced away like any schoolboy, a splendid specimen of vigorous manhood and energy. At a stated hour Admiral Sperry, accompanied by the other division commanders and a staff, landed and was received by the Governor of Western Australia and presented with an address of welcome inclosed in a casket, after which we proceeded to the Town Hall where luncheon was served to about two hundred and fifty guests. A song was sung there, composed and delivered by a sturdy member of the community, in which there was reference to Uncle Sam, the refrain, in which all joined, being:

The same old blood,
The same old speech,
The same old songs
Are good enough for each.

There was a big dinner, also a handsome garden party which was most enjoyable in the superb weather. It seemed to be a wonderful place for climate, not hot in summer and without frost in winter, beyond a little hoarfrost on the ground. There was plenty of change for health and no severe discomfort. I had leisure for a few short tramps and found excellent macadamized roads. I found also that those roads were not relics of convict labor days but of very recent construction—which spoke well for the enlightened enterprise of the little community.

Sailing to the west and northward from Albany, we had to consider ourselves pampered children of fortune and favored of the gods, doubling the re-

doubtable Cape Leeuwin, the southwest corner of the continent, with only a gentle breeze; and, immediately upon shaping the course northward along the west coast, a fresh breeze sprang up from the eastward, offshore, tending to degrade the westerly swell. On the day after the departure the decks of the low freeboard ships were dry and hatches open.

The coal consumption of two ships of the Fourth Division began to cause uneasiness after a couple of days, as they had to use practically full boiler power to maintain the standard speed set at eleven knots, some rather poor Australian coal having been taken because of the nonarrival of one of the colliers at Albany. A reduction to ten and a half knots relieved them somewhat, but even that was in excess of their most economical rate. When the noon coal reports were made on the third day out (September 22) the Commander in Chief saw there was trouble ahead. We had been delayed a day and a half at Albany and speed could not be further reduced if Manila was to be reached on schedule time; and as maintenance of schedule time was imperative, signal was reluctantly made to me to reduce speed to nine knots and bring the Fourth Division to Manila as best I could. This precipitated an interesting little episode.

The new speed was signaled instantly, and we wistfully gazed at the fleet drawing away. It was an odd situation. But the one thing to do was to devise ways of economizing coal. First of all, I changed the formation from Column to Column Open Order, the difference being that in the latter formation the ships are in two very slightly separated columns, odd-numbered ships in one column and even-numbered in the other, so that there is double dis-

tance between the ships and none gets the quick water from the propellers of its leader. That quick water additionally affects the steering of the following ship and more power is used up. I also notified all ships that they would not be called upon for reserve speed; under the requirements of the signal book, which I was able to change a few years later, every ship in formation had to maintain steam necessary for a reserve speed one-quarter greater than the prescribed standard speed in case of emergency. Release from that requirement would naturally effect economy. As a consequence of those measures and of maintaining a regular speed the coal reports at noon of September 24 showed so marked a decrease of consumption that I signaled to each captain asking what speed he thought he could make without disproportionate coal expenditure, with present boiler power, provided the speed were kept regular and no material reserve required. The replies were so encouraging that at half-past one I increased to nine and one half knots and at three to ten knots.

The *Wisconsin* being better off than the others in the matter of coal, I had her oblique off to seven thousand five hundred yards every morning for fire-control practice in all the ships as when with the fleet, thus avoiding any loss of practice. Our independence of the fleet was emphasized in a pleasantly jaunty way by two of the ships on the morning after the fleet had drawn ahead. They had not had the opportunity to salute my flag since joining the division, and so at eight o'clock they fired the 13-gun salute in the loneliness of that ocean.

A matter of possible perplexity was beginning to loom in the question of when to enter Lombok Strait.

There being no lights, no characteristic soundings, strong and variable cross-currents, and a hazy atmosphere due to dust from the Australian plains, my great preference was for making it during daylight, although that might introduce complications in the navigation of the Eastern Archipelago beyond. But, as we could not alter speed from what was found to be the maximum possible with safe coal economy, it was a matter that circumstances would settle for us.

The conditions for steaming continued to be so perfect on September 24, what with a smooth sea and a steady, moderate breeze abeam giving a good, steady, natural draft, that, toward evening, I signaled a general inquiry as to what coal consumption would be necessary for ten and one-half knots without maintaining reserve power. The reply of the poorest steamer, associated with the amount she had on hand, indicated ability to make two thousand five hundred miles. As the distance to Manila was then two thousand one hundred and seven miles, that would leave a good margin, against which, however, account had to be taken of several considerations: During the run through Makassar Strait the current would be adverse, and through other parts of the archipelago the currents would be unknown and varied; there were also the possibilities of encountering a typhoon or of that poorest steamer suddenly signaling that an inspection of the bunkers showed a shortage of fifty tons or so. (One ship had done that twice in the preceding two months.) I concluded that it would be all right and signaled that at noon of the next day we would increase to ten and a half knots. This was done, and it brought us to Lombok Strait at about ten o'clock on September 26,

the navigator of the *Wisconsin* being thus able to establish the position, by observation, some hours before, so that no time was lost in hunting for the unlighted entrance. The swirls of the tide in that Strait, although it is eleven miles wide, were remarkable; they twisted those big ships about like playthings, and one of them swerved 45 degrees from the course. The heat also was intense, 96 degrees, and not very much less during the next two days in the Eastern Archipelago.

It could safely be assumed that the fleet had not entered the strait one moment before daylight, which was at half-past five, and it was, therefore, only four and one-half hours, or about forty-four miles, ahead of us, and probably less; but as a matter of fact we caught their wireless position signal at noon which showed them to be only twenty-eight miles ahead. But then we caught another wireless order that their speed would be raised to eleven knots at half-past one.

The interest in this chase was very great. In close collaboration with Captain Beatty and the navigator, Lieutenant-Commander Vogelgesang, I undertook to cut off all possible corners, and with such success that by noon of September 27 we had closed up to nineteen miles, in spite of steaming at half a knot less speed. To forestall any possible misconception, I must add that the fleet was handled along the same courses that I would have followed if in command of it. A division of four comparatively small ships is considerably more handy than a fleet of heavier ones, and, spurred by the peculiar interest of the chase, we took every advantage of the situation. As a matter of precaution, as well as to add what we might to the small hydrographic knowledge of that

region, soundings were taken with the sounding machines, the ships alternating and running wire out to a depth of three hundred fathoms. A line of soundings of "No bottom at three hundred" was thus run across a part of the archipelago where there were no soundings on the chart.

At one o'clock on September 27, on the strength of encouraging coal reports, I ordered "Speed eleven knots," and we jogged along on even terms with the fleet. There was not much further possibility of cutting off corners, but there did seem some hope of profiting by keeping out of the strength of adverse currents. The meager sailing directions said that during the S. E. monsoon the southerly current through Makassar Strait is pushed over to the western part; so we hugged the coast of Celebes Island, Captain Beatty and the navigator and I being on the bridge practically all night, and there being a good light in sight at eight o'clock and another at two o'clock and daylight at half-past five. In the early part of the evening the energetic flag lieutenant began signaling with a searchlight, using the beam of light to wig-wag with—a rather laborious process, but the searchlight shutter had not been devised then, and in any event the searchlight was below the horizon to those other ships; he got their attention, and gave our position and obtained theirs, which showed them to be at the same distance ahead as at noon. But by the next morning our close attention to navigation during the night had netted us five miles of gain, the fleet being in plain sight fourteen miles away.

The breeze having fallen there was not much reason to hope that the strength of the current would continue in the western part: but, relying on the

general principle that currents are less strong inshore, we kept close in and at daylight the next morning the stadimeters showed the rear ship to be only eight thousand yards from the *Wisconsin.* After that it was only a question of our ships making about one-eighth of a knot more to join the formation, and the fleet entered Manila Bay intact.

The week in Manila was passed mainly in an alternation of coaling ship and riding out typhoons. The first of the typhoons came so soon after our arrival that, if the Fourth Division had been as long delayed as at first seemed inevitable, we would have caught it outside. In the bay, with good holding ground, they only caused inconvenience. But there seemed to be no end to them, and we had no sooner left port to proceed to Japan than an intangible something gave the impression that a marked sultriness was the precursor of a blow. That became verified, the wind freshening from N.N.E. which was about ahead, with a stormy look. That direction of wind would indicate a typhoon advancing from about S.E.—if it were a typhoon, which was not certain as it might well be the new N.E. monsoon starting in butt-end first. In the afternoon of the second day the fleet speed was reduced to nine knots, and the Commander in Chief wirelessed to me that he would reduce to seven or eight knots if I thought it advisable for the Fourth Division. I recommended eight knots, which was done. But even that was more than those low freeboard ships could well stand. Before long the *Kearsarge,* plunging so heavily into it, snapped off her fore topgallantmast with the wireless and had to fall out and lie-to to secure the wreckage. The wind and sea continued to rise and the barometer to fall. I finally signaled to the fleet flag-

ship recommending seven knots for the Fourth Division, to which the reply came authorizing me to proceed at that speed. So, for a second time, we were constrained to see the rest of the fleet draw away from us.

That night there was heavy weather. The *Wisconsin* had both lifeboats swept away, as also had one of the other ships. At daylight there was no motion of the upper clouds to give any clue as to whether the disturbance was a typhoon; but not long afterwards, through occasional breaks in the light gray clouds to the southward, I detected the inky-black mass of the typhoon storm cloud. That convinced me; but we seemed to be caught in a trap, in this way: typhoons passing the northern end of the Philippines are apt to curve either to the westward toward the China coast, or to the eastward and pass off near Japan. We were right in its track, and if we could but know which way it would curve, we could better conditions and run out of it. Of course, the more slowly we went the nearer we would be to the center when it began to curve. But I had to slow down, and it was coming right for us.

Finally, at about seven o'clock, I happened to glance up and saw my admiral's flag blowing out a little to port, the wind having been ahead. That quickly became much more pronounced, and the Captain's orderly came rushing aft to report that the barometer had started up and the wind had shifted a couple of points to the eastward. I instantly acted on that and signaled to the division "Course E.N.E.; speed six knots; distance one thousand yards." After a while the wind went another point, to E. by N. and the barometer kept rising, so we steered E. by N.; the storm was evidently going

off to the westward, and we were in the safe position and standing in the right direction. There were still some hours of uneasiness, however; while we were certainly moving away from in front of the storm, our progress was so much slower than its progress that it continued to get nearer. The six knots that we were making according to engine revolutions did not mean more than one or two over the ground because of the wind and sea. We did feel a little disturbed to learn, at the end of a couple of hours, that the barometer had gone down two one-hundredths, and that the wind had stopped veering; but very soon I caught sight of the upper scud moving from about southeast, which was a promising sign of improvement as in a revolving storm the movements of the upper strata precede those of the lower. I asked the *Kentucky* if she could stand another knot, to which she cheerily replied "Yes," evidently appreciating the situation. In pleasant response to that the wind went to east within an hour.

So the day passed on until toward sunset when conditions began to improve rapidly, except that the barometer would not budge. I was on the forward lower bridge with the captain, the navigator and others, and said that I thought a feather would turn the scale; then I added that I would furnish the feather and told them just to wait there half an hour. I went below, and came up clean shaven, with a great gash on my chin, and in an immaculate suit of white. The barometer could not stand that, but started definitely to rise. By eight, the wind being E.S.E. and the swell going rapidly down and the barometer going right up, I shaped the course to chase the fleet again and gradually raised the speed to ten knots, then eleven, and finally eleven and three-quarters.

The next day came the startling cry of "Man overboard from the *Illinois.*" Thank Heaven she still had her lifeboats, and so had the *Kentucky* astern of her. Both of those ships got their boats away, and after a while we got the signal that the *Kentucky* had picked the man up. So I signaled: "*Illinois,* congratulations," and "*Kentucky,* well done," and stood on slowly for them to hoist their boats and catch up. But we lost nearly an hour.

It took less than two days to catch up, however; and the fleet entered Tokyo Bay intact.

While approaching that bay I was greatly interested in an impromptu object lesson in visibility and the question of how best to paint war vessels for advantage in battle. Our ships were all white except the yellow masts and smoke pipes. A couple of large black steamers came out from Yokohama to greet us. Under the atmospheric conditions happening to exist just at that time, we made them out at a long distance, but it was evident from the way they steered and suddenly changed course that they did not see us for some time; indeed the leader of our column was hardly discernible by our own rear ships. Had those two black ships been an enemy fleet we could have opened fire and maltreated them before they knew of our presence.

We knew at Manila that we were to be the recipients of much civility and hospitality in Japan, being informed that all the admirals and their flag lieutenants had been invited by the Emperor to occupy one of the imperial palaces in Tokyo; and that, of course, was an order. Personally, I had received an invitation at the same time from Vice Admiral Saito, whom I had known many years before when he was in Washington as Naval Attaché, to stay at

his house, while the others stayed at the palace; but I had to cable and decline. The prospect of passing practically the whole week in Tokyo was somewhat disturbing, as the distance to Yokohama where the ships would be was too great to permit going back and forth, as at Sydney.

The cordiality displayed in popular welcome was most remarkable, amounting often to actual frenzy. On the railway journey from Yokohama, at every village or settlement that we passed, the children, in hundreds, were aligned, holding alternately Japanese and American flags and waving them as they shouted their *banzais;* and when the train entered the Tokyo station two immense groups of children sang, respectively, "Hail Columbia" and "The Star Spangled Banner" in succession. All this was typical of the greetings upon every occasion of our going about. As an illustration of how the feeling probably permeated all Japan, a countryman arrived on our second day, having walked fifty miles from his home carrying on his back twenty baskets (of good size) of grapes from his own vineyard for the American admirals and captains.

The imperial carriages were in waiting and took us to the Shiba palace, where we were most comfortably installed. The really handsome part of the establishment was the Japanese part where the Emperor would stay; adjoining that is a new occidental style of building for guests, superb in the matter of space and lofty ceilings, with carved ebony furniture and electric lights. The garden, three hundred years old, was beautiful in its labyrinth of pebbly walks through miniature mountain ranges and across miniature ponderous stone bridges spanning miniature rivers, and leading to miniature island conti-

nents; and every tree and bush had been clipped and trained with the utmost precision. The service of the establishment was quite perfect, both as to servants within and the sentries and watchmen without; and a Japanese naval officer who could speak a little English reported for duty on the staff of each admiral.

An immense round of formal visits had to be made to return the prompt calls of members of the cabinet and ministers, after which we were entertained at luncheon by the American Ambassador and Mrs. O'Brien. Apart from the pleasure of meeting the hostess and guests, that luncheon table was a marvel; all the center was a sea of blue sand, with battleships and gunboats and junks riding the waves, and the ends were closed by most artistically fashioned shores of rock, with green hills rising beyond, diversified with valleys and little, foaming torrents—most picturesque.

The most impressive incident of our stay was our reception in audience by the Emperor, and afterwards in a separate hall by the Empress. My recollection of His Majesty, as I had seen him in 1872, was so keen that I would have recognized him without difficulty. In the intervening years he had taken on but little age, but had become still more affable and liberal in his attitude, as shown by the personal greeting and handshake to each admiral and captain. The ceremonial of introduction was carefully explained to us beforehand, with especial care for the audience with Her Majesty, that being by far the most recent privilege granted. Advancing into the room, one at a time, a bow was immediately made, then a certain number of steps and another bow, and then an advance to greeting distance. After the

exchange of a few words the departure was made in the direction of a different door, keeping always facing the Empress and making a bow at every few backward steps. The Emperor afterwards gave a very gorgeous luncheon in our honor in a superb hall; he sat quite rigidly through it, but toward the end lifted his glass of champagne, turned toward the American Ambassador, bowed his head quickly, in indication of drinking his health, and drank.

After that there were many entertainments of various kinds—dinners, evening receptions, garden parties—all very elaborate and very handsome. One garden party was given by Admiral Count Togo in the Imperial Gardens. That was a magnificent place, a part being laid out in prim flowerbeds, and beyond that a park of lawns, woods, ponds, cascades and bridges, apparently very extensive, for when Vice Admiral Ijuin and an American lady and I had walked for a long time, the lady asked if it extended much farther and he replied, "Oh! no; about a mile."

One could not fail to be impressed by the great men who of late years had been so prominent in the public eye. Admiral Togo seemed the very embodiment of force and capacity. I was so fortunate as to be placed next to him at several banquets and found that, while he could speak but a few words of English, he could understand very well. He seemed smilingly interested when I drew an outline, on the tablecloth, of Japan and Korea and the Tsushima Island, and said that I had been the Chief Intelligence Officer at the time of the war with Russia and that, when every one was guessing where his fleet was and where he would engage the Russians in that last battle, two days before they came together I had put my finger on the chart northward of Tsushima,

and said that the battle would be there. Of course, that had been mere guesswork on my part, based upon principles of strategy, for I had no knowledge of where that fleet was being held in readiness.

We also saw a good deal of Vice Admiral Ijuin, whose division of cruisers had been engaged in the same battle; Vice Admiral Kamimura who had watched the Vladivostok cruisers and finally had brought them to action and sunk the *Rurik;* and Admiral of the Fleet, Count Ito, who commanded Japan's first modern fleet and fought the Chinese in the battle of the Yalu. No less distinguished were General Kuroki, who had been the Commander in Chief on shore during the war with Russia, and General Nogi, who had captured Port Arthur.

There were also statesmen of international fame, adding the *éclat* of their presence at various gatherings. I had the honor at different times of being placed next to Marquis Katsura, the Prime Minister, and Count Komura, Minister for Foreign Affairs, and was much impressed by their personality.

At most of the entertainments it fell to Admiral Sperry to make replies, when needed, to the toasts and addresses of welcome. But upon one occasion, at an elaborate luncheon at the Mitsui Club, given by Baron Mitsui, I learned on our way there that the two admirals senior to me were on their way to a different place and, therefore, that I would probably be called upon. Baron Mitsui was the head of the enormous firm of that name, the members of which were all members of his family—bankers and merchants in many branches; and the membership of the club was limited to the firm. A member proposed the health of the American admiral and his officers, to which I made this hastily prepared reply:

"Baron Mitsui and gentlemen: I am afraid that as our stay lengthens in Tokyo and Japan we will find ourselves using hackneyed phrases in relation to the civilities and cordiality with which we are constantly being greeted. But it is only from the limitations of the English language that we are exposed to the danger; and our expressions of appreciation should not properly be considered hackneyed any more than are the *banzais* that greet us everywhere in the streets, or the evidences of welcome that seem to spring spontaneously to the lips of our hosts as we assemble under their roofs. This cordiality is no matter of surprise to us. Those of us who have had the good fortune to visit Japan before have known well how the traditional friendship for us would come to the fore. The only matter of surprise to us has been that it has been found possible to exceed the measure of cordiality that we knew to exist.

"I had the privilege of coming to Japanese waters thirty-eight years ago; and thirty-six years ago, in company with the admiral upon whose staff I was, I had the honor of being admitted in audience to His Majesty the Emperor. It was a great pleasure to me to note yesterday, and I congratulate Japan upon, the lightness with which the intervening years have weighed upon His Majesty. I see no more change there than I do in the hearts of the Japanese people, and I sincerely hope and feel very sure that the coming years will see no more change than has come up to the present.

"I have now only to voice the sentiments of my brother officers, and invite all to join me in a toast to Baron Mitsui, his family, his firm, and his club."

That friendly company did not fail to give pleasant expression to their appreciation of my words, and the feast continued in an atmosphere of great enthusiasm.

To the last moment of our stay in those waters, there was no diminution in the friendly manifestations, which also took forms other than banquets and receptions. There had been careful study of ways to picture to us matters and methods peculiarly illustrative of Japan's earlier life; members of illustrious families took parts in reproductions of ancient stage plays with the conceptions of acting of centuries back; and the classic *Nô* dance was rendered for our benefit at an entertainment given by the President of the Nippon Yusen Kaisha.

The *Nô* is the old classic mime of Japan. It had its origin in an incident, said to have occurred in the Age of the Gods when, the Sun Goddess having gone into a cave, thus throwing the universe into darkness, a dance was performed by the Immortals to entice her from her retirement. Many of the episodes in history or mythology were subsequently dramatized, and it became the fashion to perform the dramas in aristocratic mansions, the action being shown by dancers and the libretto chanted by a chorus, the costumes and all the accessories being of the most magnificent description. Masks being an essential part of the paraphernalia, their skillful chiseling came to be ranked among artistic achievements, and the names of men who excelled in carving them have been handed down by hundreds, while masks that bear the name of a master chiseler are highly valued.

The *Nô* has not undergone any material change since it first came into favor; it is danced to-day just as it was danced a thousand years ago, and it thus

acquires interest as a faithful survival of Japan's ancient civilization. As it is usually of a solemn and even sad character, artistic principles required that it should be relieved by something of a farcical nature; hence in the interludes of *Nô* performances, if not as their preludes or sequels, a *"Kyogen"* (comic mime) gradually came into favor. Of these *Kyogen* there is a large repertory handed down from medieval ages, but very little addition has been made in modern times.

Such things, of a nature distinct from customs in any other part of the world and almost unknown to modern Japan itself, except when brought to light in exceptional compliment, were of absorbing interest. It was only unfortunate that the rush of diversions precluded more satisfying discussion and grasp of really educational entertainments so thoughtfully planned.

At the expiration of the allotted week the fleet steamed away, exchanging official honors and cheers with the Japanese Third Division lying off Yokohama. Not blinded by the lavishness of official and private entertainment but noting the spontaneous effusions by all classes, and at the same time not pretending to discount the possibilities of the future as effected by conflicting interests or antagonisms, I came away from those waters imbued with the thought that in that day there was, in that far-distant island, no feeling toward us other than respect and cordial friendship.

China, not being favored in the matter of deep-water harbors, but anxious to join in the world-wide anthem of welcome to America's navy, had invited the fleet to visit the one conveniently available port, and had concentrated immense efforts at Amoy,

creating really a modern town, so far as public utilities were concerned. It seemed a deplorable misfortune that the typhoon, through which we had labored after leaving Manila, struck the coast a short distance south of Amoy and wrecked all the buildings that had been put up. Nothing daunted, they set to work immediately and when the time set for our visit had arrived the immense reception and banquet halls had been reërected, with an electric-lighting plant and a cuisine adapted to occidental needs, an entire *personnel* of *chefs* and waiters being brought from Hong Kong, with ample provision of viands and wines; and His Imperial Highness, Prince Lang, was there to represent the Imperial Government.

It had been decided that only one-half of the fleet should go to Amoy, and the Second Squadron was detailed, consisting of the Third and Fourth Divisions, under the command of Admiral Emory. We parted company with the fleet at sea and arrived on October 30, finding Admiral Sah there with his flagship, the *Hai Chi,* and the *Hai Chen* and the *Hai Yung.*

Amoy had already begun to feel the after-effect of the war with Japan. It had formerly been the point of export of tea from Formosa, but after the occupation of that island by Japan the exportation gradually came to be almost entirely direct. The total number of foreigners was some thirty or forty, all living on the island of Kulangsu.

No time was lost in beginning the series of banquets and other entertainments that were to be crowded into the six days of our stay. Prince Lang, who presided at most of them, was a genial host, although unable to speak to us in our own language, and possessed perceptive faculties and a sense of

humor. At the first dinner the *menu* was wholly Chinese, and, while greatly interested in it, I found it impossible to eat anything. To cover up my delinquency in that respect, I joked about it a good deal and devoted myself to being instructed and practicing with chopsticks, with such success that the Prince commented upon it; but there was something akin to a sly twinkle in his eye. After the dinner there was a theatrical entertainment, with athletic and acrobatic feats, juggling, balancing heavy china vases, etc., in which the performers exhibited greater strength, agility and dexterity than I had ever seen elsewhere. No doubt they were the finest that Prince Lang could command.

Other banquets presented features more attractive in a gustatory way. But through it all there was always present in our minds the fact that our hosts had created a community for our entertainment during six days, in which neither trouble nor expense was spared.

The final act in that pleasant drama was one of peculiarly happy conception. In the creation of the entertainment buildings, there had been placed in the reception alcove of the reception hall, where Prince Lang received and where Admiral Emory and I sat, one on either side of His Highness, two sets, each consisting of two handsome, heavy armchairs and a tea table of the Tong King blackwood, made in Canton, handsomely carved, and inlaid with shell and glass. On the last evening before our departure there was a farewell banquet, and, when Admiral Emory and I returned on board our flagships, there was one of the sets in each of our cabins.

The Imperial Government would not allow itself to be outdone in the matter of generous expression.

Each admiral and each captain was presented with a heavy and handsome silver punch bowl, bearing an inscription beginning, "From the Imperial Chinese Government. . . ." Unfortunately, as they were presented by a foreign government, acceptance could be only by Congressional action, and certain acts of Congress have not been interpreted by the Attorney General as applying to them, so they are still reposing in the custody of the State Department. When we die, our widows can have them under the ruling of that Department.

Early in the morning of November 5, the squadron put to sea and shaped the course for Subig Bay, where we were to rejoin the fleet and begin target practices. But we were to lose our Squadron commander; Admiral Emory, approaching the time of his retirement, had permission to part company and go in his flagship to Hong Kong and thence home. I had arranged it, before leaving Amoy, and when he made the signal, "Proceed on duty assigned," and hauled down the guide flag, all seven ships gave the 13-gun salute in unison. Then he sheered out of formation and proceeded on his solitary way, ending a fine career which had been characterized by gallantry and service pride.

Upon the detachment of Admiral Emory from the fleet, I was transferred to the command of the Third Division, hoisting my flag on his late flagship, the *Louisiana,* as soon as she arrived from Hong Kong. Being larger than the *Wisconsin,* and with higher freeboard aft, that ship was more convenient as a flagship except in the feature of having no sea cabin for the division commander, who was thus prevented from proper supervision of the division at night. I felt regret at leaving my first flagship, especially as

I had formed a high regard for her officers; but my personal transference was effected with the pleasant feature of being taken to the new ship in a gig manned by officers, a procedure by which they are enabled to express the existence of friendly relations.

Not long afterwards I had occasion to send to Captain Beatty and the senior engineer officer, Lieutenant Commander D. V. H. Allen, a message of congratulation for "my late flagship," having been awarded the championship for the year in engineering efficiency, adding that "she certainly never was *late.*" Appreciating the joke, they framed and hung that message in the engine room.

For some weeks, time was divided between Subig Bay and Manila Bay, some sixty miles apart, carrying on the various target practices, in which there was beginning to be an advance in the matter of supplementing the necessary record practices by others, under conditions approximating those of battle. A board was also formed, of which I was senior member, to formulate rules for the next target practice, thus preparing another step forward. The labors of that board were carried on under the great difficulty of separation of members and the impossibility of consecutive work. We had to have hurried meetings in every port visited during the rest of the cruise, but the end was finally achieved satisfactorily.

The fleet got away from Manila on December 1, and sailed the summer seas on the voyage to Ceylon, This sailing of summer seas in steamers is very different from the experience of sailing vessels in the years gone by; the latter upon entering doldrums would remain in them for days, with incessant work for the watch in trimming the sails to catch light

airs, but steamers pass right through them. The sailing vessel's work is much the more agreeable so far as mere personal comfort is concerned, but that, of course, has to be relegated to leisure-hour dreams.

Passing through Singapore Strait during daylight, and only some four miles from the roadstead, I could easily form the idea that the place was larger and much changed since I had seen it in 1870. Apart from the work of building batteries upon various hillcrests, as a consequence of England having virtually abandoned her naval base at Hong Kong and having settled upon Singapore as her primary base in the Orient, the number of fine-looking, white buildings with red roofs were evidence of increased commercial activity, while as an indication of the direction of a part of the commercial activity, there were noticeable on a pretty, well-wooded island immediately in front but on the other side of the strait, thirteen immense white oil tanks.

Three days were passed very pleasantly in the Singapore and Malacca Straits, it being much cooler than one would expect in that latitude. Then, after crossing the Bay of Bengal, the fleet arrived at Colombo and was promptly taken inside the immense breakwaters by which the superb harbor had been cribbed, so to speak, from the open sea, and comfortably moored to buoys with great skill on the part of the harbormaster's people. Some of the civilities that were to be extended to us were communicated to us by wireless some days before our arrival; therefore, there was no time lost.

Upon the conclusion of the immediate ceremonies of welcome, I was taken away to be the guest of General Lawrence, the Commanding General of all the forces in Ceylon, at Braybrooke Hall, his quarters,

well out of town; and Lieutenant Craven and I were the recipients there of every form of hospitality under the peculiar conditions and customs of that distant land. The Governor, Colonel Sir H. E. McCallum, after entertaining at a handsome banquet, placed his automobile frequently at the disposal of our host, who was, indeed, a host in himself. Drives along the promenades and about the lake; visits to tea estates, and to the rubber plantations where trees would be tapped for our special view; rambles in the streets of the town and in the shops, and contact with the interesting Sinhalese—all presented an experience all the more attractive because of its novelty.

An incident, pleasant in itself and provocative of some humorous comment, was the gift of tea to every officer and man in the fleet, from the Planters' Association. Each officer received a 5-pound box; but by some misdirection two such boxes reached me, much to my delight, as I found it exceptionally to my taste. A humorous comment was furnished by the Prime Minister in the course of a farewell banquet on the eve of our departure. His suggestion, put forward with much jollity, was that the liberal presentation of that tea was possibly intended as a retort courteous for a certain little tea party in Boston Harbor many years before.

Our usual week in port expired on December 20, and on that day we put to sea, and sped across the base of the Arabian Sea, through the Gulf of Aden, and up the Red Sea. In the Gulf the N.E. monsoon was very faint, but it brought a strange freshness which we tried to explain by attributing it to the snows on the Himalaya Mountains. Those mountains were two thousand miles away, with India in-

tervening, but one would hardly dare insist that cold winds from those peaks must remain aloft and not dip down upon approaching the sea. With development of aviation, and the air studies stimulated by its requirements, many such phenomena may be explained.

After passing through the canal, the divisions separated and visited different parts of the Mediterranean. The terrible earthquakes in the vicinity of Messina caused changes in the plans for the divisions, and the itinerary for the Third, which had included Malta and Algiers, was changed to Beirut and Smyrna. The former port was, however, barred to us by recent cases of pneumonic plague, so we stood on and stopped only at Smyrna. In that magnificent harbor, we found Turkish, Rumanian, Italian and French men of war, the Frenchman, the *Faucon,* being under the command of the well-known writer on naval subjects, Commander Daveluy.

There was the usual round of official calls to make and receive, but we had considerably more leisure for our own purposes than at any port visited, partly because of not having stopped at Beirut and, therefore, having two weeks instead of only one. The frequent rains and resulting paralyzing mud interfered at times with intended visits to Ephesus and other neighboring places of historic interest; and there was frequent amused quotation of the comment in the Sailing Directions of Smyrna being "the least interesting place in the Mediterranean"; but the mere manners and customs of the people furnished ample material to engage attention throughout a stay no longer than ours. One thing that we learned gave a certain piquancy to reflections on social problems: the recent granting of a constitution

in Turkey was not expected to effect much change in the modes and conditions of living, but it had produced one important change, in that it was considered necessary and in keeping with the supposedly new conditions to open all jails, hence the country was flooded with hardened criminals. It was said that two well-to-do persons had received notices from two liberated brigands that they would shortly be kidnapped and held for ransom.

One result of the important step in governmental evolution taken by the Young Turks was the sending of ten Turkish naval officers to America. Passage was proffered them in the ships of the fleet. The Third Division was charged with taking the entire party to the rendezvous of the fleet at Gibraltar, where some would be transferred to other ships. They proved to be pleasant gentlemen and keen observers, able to speak English, and frankly appreciative of the welcome extended to them.

The American colony gave a ball in honor of our ships, and evinced their pleasure at our visiting the port. The Hellenic Club, also, and the Consulate and various Turkish dignitaries were very polite, apart from the ceremonial visits, the *Vali* of the Province inquiring what would be a convenient evening for me to attend a banquet. The American Ambassador, Mr. Leishman, came down from Constantinople in his *stationnaire,* the U.S.S. *Scorpion,* and advantage was taken of his presence to enhance the dignity of that entertainment. At the close it seemed incumbent upon me to make an address, improving the opportunity to allude to the friendly interest felt in America in the political evolution recently accomplished in the Ottoman Empire and to give assurance of the welcome extended to the naval officers

who were about to accompany the fleet. The address, which was necessarily in French in order to reach our hosts, was as follows: *

"Votre Excellence et Messieurs:

"C'est un fait revêtu peut-être d'une certaine importance qu'en ce moment se trouvent mouillés dans ce port magnifique quatre cuirassés de l'escadre américaine. Il ne revient pas à nous autres marins de nous exprimer au sujet de questions diplomatiques ni de gros évènements exécutifs tels que ceux qui sont survenus dernièrement dans l'empire ottoman. Cependant je conçois qu'il ne manque pas d'observateurs qui se fassent un plaisir d'appuyer sur la coïncidence de ce que cette première visite par une escadre se soit faite si à propos après l'accomplissement de l'important mouvement intérieur de la Sublime Porte, suggérant l'idée que la république des Etats Unis puisse désirer de cette façon exprimer ses félicitations respectueuses au gouvernement impérial qui venait de faire un pas d'une importance majeure. Quel que soit le cas là dessus, je tiens à vous assurer, Excellence, à vous et à tous les convives distingués qui se trouvent ici convoqués que telle signification ne doit pas nécessairement se rattacher à l'aspect amical de notre visite. J' ai à vous dire que les sentiments de bonne volonté que nous ressentons envers la marine ottomane ne se doivent à aucune situation ou question politique.

"Vers la fin d'un long voyage de circonnavigation, ayant parcouru toutes les mers et visité bon nombre de pays disposés le long de notre sillon dans les deux hémisphères, nous avons été accordés le plaisir de quitter la route directe pour nous rendre dans ce port et visiter ce peuple que nous espérons mieux

connaître dans l'avenir que n'en a été le cas jusqu'à ce moment; et nous nous trouvons animés du désir de développer une bonne amitié avec nos hôtes.

"Entre marins il existe toujours une sympathie latente, née de l'exercice d'une même rude profession; et j' espère bien que l'acceuil que nous saurons faire aux officiers distingués qui vont s'embarquer à notre bord se reconnaîtra comme spontané, provenant d'une franche amitié et indépendant de toute impulsion diplomatique.

"Ayant en vue la camaraderie qui dès ce moment va s'établir entre les membres des deux services, je sollicite aux mains de Votre Excellence l'honneur de porter un toast. Je vous prie, Messieurs, d'élever vos coupes en honneur de la marine ottomane."

TRANSLATION:

"Your Excellency and Gentlemen: It is a circumstance invested perhaps with a certain importance that four armorclads of the American Navy are at this moment lying in this magnificent harbor. It does not fall to us seamen to express ourselves on the subject of diplomatic questions or of big executive events such as have recently come to pass in the Ottoman Empire. Nevertheless, I conceive that observers are not lacking who will find pleasure in weighing upon the coincidence of this first visit of a squadron happening so opportunely after the accomplishment of the important movement of the Sublime Porte, suggesting the idea that the republic of the United States might wish to express in this way its respectful felicitations to the Imperial government which had just taken a step of major importance. However that may be, I beg to assure you, Excellency, you and all the distinguished guests here

gathered, that such signification need not necessarily be associated with the friendly aspect of our visit. I have to say to you that the good will which we feel for the Ottoman navy is born of no political situation or question.

"Toward the end of a long, world-encircling cruise, having traversed all the seas and visited many countries bordering upon our track in the two hemispheres, we have been given the pleasure of diverging from the direct route and coming to this port to visit a people whom we hope to know better in the future than we have in the past; and we have the desire to develop a good friendship with our hosts.

"Between seamen there lies always a latent sympathy, born of the exercise of a common rugged profession; and I hope that the greeting which we will give to the distinguished officers who are about to embark with us will be recognized as spontaneous, springing from a frank friendship and independent of any diplomatic impulse.

"Having in sight the comradeship which after this will be established between the members of the two services, I beg, at the hands of Your Excellency, the honor of offering a toast. I pray you, gentlemen, to raise your cups in honor of the Ottoman Navy."

Gibraltar had been finally designated as the rendezvous for the fleet in preparation for the final voyage across the Atlantic, terminating the world cruise; and the Third Division proceeded there direct from Smyrna. On this passage there was time available, and I took advantage of the opportunity to carry on certain tactical exercises for which there had not been time during any passage by the entire fleet; and in other ways I sought to make up defi-

ciencies caused by the great haste in rushing the fleet from port to port in order to make good the schedule times.

As an instance of what details enter into safe handling of ships, every ship had mechanical telegraphs from the bridge to the engine rooms with which to order changes of speed, and also old-fashioned gongs to use in case of a breakdown of the other. An occasion had arisen not long before for that very use of the gong in one of the ships, but the people on the bridge (very likely in the engine rooms, too) had forgotten them, and there was serious danger of disaster because of an important reserve implement not being thought of when needed. So I sent a confidential wireless to each captain one day that at a signal "Execute" he should handle his engines with the gongs without warning, going "ahead slow," "stop," "back," and "ahead" again in succession and hoist the affirmative pennant when completed. My old ship, the *Virginia,* reported in about a minute. The others took an indefinite time, and one captain said afterwards that his engineers simply threw up their hands, not knowing what it meant. After that, they were just that much better prepared to meet one emergency.

The plan, which lay with Admiral Sperry to carry out, was that the fleet should pass in at the Capes of Virginia on Washington's Birthday, to be reviewed by the President. This entailed sailing from Gibraltar on February 6, in order to make sure, and we did have some boisterous weather. Meeting a big, commercial liner we had opportunity to compare her moderate and stately rolls with the behavior of some of our ships. The difference is naturally due to the difference in the nature and disposition of

cargo and weights in the two types of ships, the naval constructor having much the more complex problem in having great isolated weights to deal with, instead of carefully distributed cargoes, and with limitations imposed by tactical considerations. It was an interesting comparison, and gave food for thought.

A nice bit of good luck attended the completion of the cruise. On February 19, a pleasant southeasterly breeze freshened during the day and by sunset the sun's vicinity looked quite yellowish-gray and wet, while the horizon to the southward was very sharply defined and looked windy, with a falling barometer. It seemed to indicate a cyclone coming up from the West Indies and promising to pass ahead of the fleet; and, confirming that indication, the blow unfolded itself as prettily as a picture. Through the night the barometer kept falling, and the wind rose to a gale and hauled to the southward, reaching a direction that showed that the center was well to the northward of right ahead. Next morning the barometer stopped falling, and, as the disturbance moved northward faster than the fleet moved westward, it got farther away and we slipped in behind it and made the landfall under comfortable circumstances. During one day it was quite rough, and the speed had to be reduced one knot for the Fourth Division; but if the storm had been one day later, we would have been right in it, and possibly would not have arrived intact on the day set. As it was, we anchored on the Southern Drill Ground at about midnight on February 21, and stood in early and had good weather for the review—exactly on time.

Meeting the Third Squadron that had come out to escort the fleet in, we had our first glimpse of the peculiar cage masts of the two new battleships, the

*Idaho* and the *Mississippi,* which, later, were sold to Greece, their names being reserved for future so-called superdreadnaughts. Those cage masts looked like lighthouses emerging from the ocean and were the subject of varied comment—a wonderfully clever and happy conception as they afterwards proved to be.

The homecoming was accentuated by the ever-thoughtful, ever-present Navy League, with a banquet at Fortress Monroe, where the cordial sentiments of the League were brought home to us in a way that was at once pleasant and stirring.

And so ended a somewhat unique cruise—unique in its extent, unique in its successful achievement, and unique in its spreading the gospel of good will.

U.S.S. CONNECTICUT, 1911

## CHAPTER XIII

COMMANDER IN CHIEF OF THE ATLANTIC FLEET—RETIRED LIST—DUTY AND COMMENTS

Drill grounds—Battle target practices—San Marcos firings—Battle Efficiency pennant—Towing gear and practice—Fleet training—Radio signaling—Fog experience—Seamen to share guard duty with Marines—Sale of cigarettes forbidden—Hudson-Fulton Celebration—Rank of foreign flag officers—Military parade—Banquets—Speech—Loving cups for Japanese and Chinese navies—Camp life of seamen and marines at Guantanamo Bay—Rifle range—Instruction in swimming—Old time seamanship drills—Visit to President of Cuba—Improvement in ship models—Pilgrims' Memorial Monument, Provincetown—Passage to Newport in fog—Cruise to Europe—Portland harbor—Entertainments in London—Cherbourg—Speeches—Chateaux—Scouting problem—Guantanamo Bay—Detached from command of fleet—Friendly farewells—Reconstruction of Signal system—Commands of "Right" and "Left" to steersmen—Appointed Hydrographer—Transliteration of Russian alphabet characters—Promotion by selection—Sea service qualification—Observations on characteristics—Whatever you do, do with all your might.

Not long after the arrival of the fleet in Hampton Roads the division commanders were called to Washington to confer with the Department upon the work of repairs and alterations needed by their ships; and I was notified that President Roosevelt had approved my appointment as Commander in Chief of the At-

lantic Fleet. The written order followed in due course, and on March 8, 1909, I relieved Admiral Sperry, who then withdrew from active work and shortly afterwards attained the statutory retiring age.

It must have been with complacent retrospect that Admiral Sperry saw his career draw to a close. Those who are familiar with his distinguished activities as President of the Naval War College and as Technical Delegate to the Hague Convention of 1907 recognize in them the natural fructification of his abilities and character as displayed through an honorable and useful career.

My transfer to the flagship *Connecticut* for the chief command was accompanied by pleasing incidents, among which may be mentioned the fact that the officers of the *Louisiana* manned the 12-oared barge and pulled me to my new flagship,—a most inspiring act of friendly farewell. Before the day of my leaving the *Louisiana* a wireless message came to me, reading, "The chief petty officers and crew of your old ship *Virginia* wish to congratulate you on your appointment as Commander in Chief United States Atlantic Fleet." This message was signed by three chief petty officers and the First Sergeant of Marines. Few things could give greater pleasure than that message.

Among the first things for me to do was to take the yearly 50-mile walk that had been ordered for the Navy as well as the Army. Civil Engineer L. M. Cox, one time *Jefe de Obras Públicas* of Guam and my frequent hiking companion there, was indicated as a natural walking mate now, and he came to Washington for the purpose. Planning to do it in two days, we looked over ten miles of the canal towpath

one day, and on the next began with twenty-seven miles, intending to do twenty-three on the morrow. But the next day was rainy, and rather than trudge through drizzle and showers for twenty-three miles we counted in the ten miles of looking over the ground, and, by then doing thirteen miles, finished up the walk in the three days.

During the fifteen months that the fleet had been dependent largely upon its own resources in the matter of maintenance, there had been developments and advances made at home, especially in ordnance and engineering *matériel,* and the sum of changes now proposed and approved, coupled with needed repairs, kept the ships at the navy yards for some time. Sometimes remarks would be heard in criticism of the amount of repair work seemingly required, but they were not just, nor was the work all repair work. There had come to be a realization of the necessity of removing all upper works that were not essential. With that, and installing the new fire-control masts, popularly known as cage masts, and the complex system of electric wiring for the improved system of fire control, an immense amount of work was necessary. At this time also the gray war color was definitely adopted for all ships.

In time, the ships got away, in good condition, and no time was lost in buckling down to work. The Atlantic Fleet is most fortunate in having for its purposes three most excellent sea areas for rendezvous and training,—Cape Cod Bay, the Southern Drill Ground off the Capes of the Chesapeake, and Guantanamo Bay, on the South Coast of Cuba.

Cape Cod Bay, while extensive enough for gun-target practices other than battle practices involving distant approach, is also excellently adapted to other

fields of training. There is usually a good deal of fog there in the summer; but should that intervene and continue through awkward lengths of time while under way for elementary practice in fleet maneuvers, as a last resort the fleet could always anchor. There was no occasion to fear lack of fog experience resulting from the convenience of being able to anchor; occasions for handling ships during passages in fog were abundant enough. The Southern Drill Ground also presented the attractive feature of an extended shelf of anchorage depths, where targets and ships could be anchored during or between target practices, out of sight of land, and with ample sea room for tactical approaches.

The first summer was divided between these two grounds and I was able to carry out schemes of battle target practice which were more advanced than they may seem when viewed with the retrospect of twelve years. At that time there was just beginning to be discussion of the possibility of useful concentration of fire,—feeling our way in the field of improved fire control. I was quite firm in the belief that the only way to find out was to try it, which I did, notwithstanding the advice of the Inspector of Target Practice who was present in the fleet and who for some reason was opposed to the plan. With four targets, four hundred yards apart, in tow of a ship, one division of battleships in the fleet column was detailed to open fire and shift fire as directed by signal. It was the first battle practice of the kind ever tried by our fleet, and even under those pioneer conditions it became evident that certainly two, and possibly three, ships properly trained could shift fire and alternate salvos so as to concentrate satisfactorily on one distant moving target. I was given

to understand that that was something of a surprise to the Naval War College which, of course, had to take cognizance of it; but that is quite the proper procedure—the fleet, with the help of suggestion from the College, to demonstrate what can and what cannot be done, and the College to utilize that knowledge. That year's practice certainly intrenched the practice of salvo firing with guns.

With torpedoes, salvo firing, possibly from a group of ships or destroyers, was perhaps yet to come. Less attention had been given to them than to guns, and there was a dismal sense of continuing inefficiency in that weapon. Nevertheless, while not formulating any definite immediate expectation of advanced, tactical employment of them, I felt assured that torpedoes had better days coming, and, after a year or so, I advanced their assumed range in battle exercises from four thousand to six thousand yards. Even that, strangely little as it seems now, was regarded with some doubt.

As the Inspector of Target Practice pursued the even tenor of his progressive way, it came to be recognized that important results would spring from firing against an actual ship's structure, and the Department was persuaded by the Aid for Operations to authorize the sacrifice of the first *Texas,* re-named *San Marcos,* for that purpose. The firings took place in March, 1911, and formed, without doubt, the most important experiments that we had undertaken up to that time. It was not a target practice in the usual meaning of the term, but a spotters' practice, the fire (of the *New Hampshire*) being controlled from the fire-control top by the Fleet Ordnance Officer, Lieutenant Commander Craven, with the idea primarily of giving experience to a number of spot-

ters. No note was made, at the time, of the shots intended to hit the target-ship, the fall of salvos being so regulated as to make the practice as interesting and valuable as possible. There was an exception to this when using high-explosive projectiles, an effort then being made to get a good percentage of hits.

A by-product of the practice was a great improvement in fuses and service ammunition; but paramount was the appreciation gained of the commanding importance of experienced spotters, as upon them may rest the responsibility for the gain or loss of a battle. As an element of the peculiar conditions affecting spotting with a material hull as a target, it was clearly shown that shots that fall beyond are lost for spotting, it being practically impossible to estimate how far over they fall, particularly from low spotting positions; and, of course, such "overs" do not in any way disturb the enemy by splash or ricochet. The importance was also emphasized of having a well-defined, unmistakable, and seldom obscured point of aim, the corollary of which was that no pains should be spared to avoid giving the enemy that help.

The introduction of the element of competition and the awarding of honors and bonuses had produced such fine results in improving gunnery that the possibility of extending the same for engineering efficiency was being considered. In response to a call for a suggestion I submitted the recommendation that, each year, the ship most proficient in gunnery be awarded a suitable bronze trophy, and that the ship most proficient in steaming likewise be awarded a bronze trophy of distinctive design, and that those two main elements of efficiency be given relative val-

ues based upon their importance, the ship achieving the highest final multiple being entitled to fly a Battle Efficiency pennant. That plan was accepted and has remained in operation, the relative values, however, in classes of ships other than battleships differing slightly from my tentative suggestion.

A matter that had been in my mind a good deal for some time before taking command was the inadequacy of the towing facilities of the battleships as they grew larger and more unwieldly, and, coupled with that, was the doubt as to whether the rules in the seamanship books for taking ships in tow would prove successful with the changed sizes and types. During the time passed at the navy yards immediately after the return of the fleet, I issued a call to all ships for suggestions as to the rig to be recommended and asked for. Much good advice was received, and among the suggestions was a complete plan, with specifications, of an outfit consisting of a steel wire bridle to go around the after turret, and a hawser of suitable size and length to be shackled to it. This was submitted by Lieutenant Commander Philip Andrews of the *Kansas,* having been gotten up by him and Chief Boatswain James Dowling. It was so complete and excellent that little more could be done than to require that outfit for all capital ships. It became a part of the standard outfit, and we were able to begin practicing with it without delay. Practice was needed, too, I found, there being several partings of hawsers and other mishaps at first. The old methods of taking hold of the ship to be towed also proved to be ill suited, and new methods were quickly tried and adopted.

It was not long before this towing gear was called upon to justify its existence, which it did very satis-

factorily, as did also the results of the practice with it. In the course of a few years there seemed to be a veritable epidemic of lost propellers. With the increase in the number of propellers, associated with turbine engines or electric drives, complete disablement becomes correspondingly remote, but one cannot confidently foretell the results of battle or the handling of prizes.

When tackling the problem of training a new fleet, which the aggregation of ships certainly was upon issuing from the navy yards with some new ships and all with largely new crews and new sets of officers, there could not fail to be present to the mind the danger of the training being, in a measure, academic. With full consciousness that in a future war the laurel leaf for victory, or the stigma for defeat, should be shared by those who had or had not properly trained the fleet in preparation, there was the unconscious consciousness of war being a much more remote possibility with us than with other nations less protected by distance. There was a tendency to proceed without the jarring thought of actual hostilities at any moment with an enemy to whom the possibility was ever present; and that tendency was very insidious. Combating it and converting a collection of individually efficient ships into an efficient fleet was rendered possible by the best efforts of a thoroughly capable, loyal and hard-working fleet staff.

Among all who labored so faithfully and ably with me, none was more beloved than Lieutenant Commander Jonas H. Holden, the flag secretary, whose cruelly untimely death, "lost at sea," a few years later brought sorrow to us all. His capacity and at-

tractive disposition had endeared him to all with whom he came in contact.

Early in any course of fleet training comes up the requirement that ships should be practiced in movements in formation, and when a moderate expertness has been gained, there should be decisive recognition of which is the means and which is the end in fleet drills. The Navy was beginning to allude impatiently to a large part of the fleet drills as "quadrille movements" which would never be used in battle; and I shared that impatience to a considerable degree. At the same time one could not deny that a certain amount of valuable practice can be gained by a limited amount of quadrille movements regarded simply as tactical gymnastics. Those quadrille movements are not the end but are a part of the means by which inexperienced officers, as all must be when they first begin, will become practiced in all movements, even in simple column. Nostrums are ineffective and objectionable as a short cut to precision of movements; a broad-gauge apprehension of what a ship will do under operation of the rudder is the only reliable faculty, and that can be acquired more quickly and surely by a certain amount of tactical gymnastics in the presence of other ships similarly occupied than in any other way. Lines of thought, tending to undue subjection to mathematical rules, may actually be mischievous by detracting attention from the maturing of eye estimation and judgment. The impossibility of mathematical precision is shown in an examination of a sheaf of curves produced by superposing on one sheet the actual tracks of a number of vessels making a 180-degree turn with standard rudder. With the same initial point of departure the spread of the sheaf toward

the end of the turn was illuminating as an exhibition of the limited precision possible under different conditions. Differences in longitudinal disposition of heavy weights, causing differences in angular momentum, will alone affect tracks of ships of similar proportions of length and beam.

To vary the training of judgment, I inaugurated tactical movements consisting merely of following the leader; and it was very soon evident that it was as necessary to adhere to prescribed helm angles in those movements as in the quadrilles. That once appreciated, a battle column would be followed with all necessary uniformity. A considerable amount of useful experience also was gained by cruising in lines of bearing instead of in column; usually I would put the fleet in division lines of bearing, but sometimes in squadron lines, partly to give practice to the other division commanders' flagships. Apart from the general experience that the oblique lines give, there are occasions in which such lines have a specific value of their own.

Cruising in simple column is largely a waste of time so far as practice in keeping position is concerned, besides being prohibitive of efficient flag signaling and generally subjecting the ships to a scourge of smoke and cinders from the smoke pipes ahead. Even with radio signaling developed to its present state, the flags should not only not be discarded but should be used for practice, or some day the fleet might find itself helpless in the same way that some ships did during the world cruise because of never having used the auxiliary gong signals to the engine room. The difficulty with flag signaling is easily obviated by certain special column formations

that I used, but the lack of practice in maintaining position would remain.

The situation in the matter of radio signaling at that time was highly unsatisfactory, and tantalizing. Ships had the wireless outfit, but there was no provision for convenience and efficiency in its use by means of codes of signals; and even if there had been there was an almost prohibitory element in the absence of regulation and apportionment of wave lengths for different purposes and in the criminal irresponsibility of many civilian operators in interfering and holding the air for their own uses. Emergency orders, such as to stop for a man overboard or to anchor or change course in a sudden contingency, had to be spelled out after surely having the attention of all. A single ship in column, failing to anchor with the others in a fog, would create great havoc.

There were some narrow escapes from disaster due to this cause. One instance was typical. The fleet was standing out from Hampton Roads in column, and a thick fog shut down suddenly. So far as mere navigation was concerned we could have stood on and out, possibly without mishap; but schooners were likely to be at anchor beyond the Tail of the Horseshoe right in the channel. We soon discerned from the varied tones of whistles, which the signalmen knew well, that some of the ships were out of place, the rear divisions closing in. I turned to the flag lieutenant, Lieutenant R. D. White, and said, "Jump down to the wireless room, tell the Fourth Division to anchor instantly and report when anchored, then the same to the Third, then to the Second, and let me know when you have done it." He flew below, and in a very short time was back on the

bridge, reporting all done. I said to myself that he had justified his existence in those few moments, for seconds counted. I then made gun signals to the First Division to stop and to anchor. After an hour or so the fog cleared and there were revealed a short distance down the reach some five or six large, three-masted schooners at anchor and riding athwart stream in the slack tide. Had we not succeeded in anchoring when we did the fleet would have gone right through the group, probably sinking them all, not to mention what would have happened to the ships themselves when suddenly coming upon them. Previous experiences with gun signals for stopping or anchoring had left me very loath to trust to them in such a tight place. Things are easier now.

There were several questions concerning the *personnel* that had engaged my attention some time before taking command of the fleet. One of them bore upon the fact that all guard duty was being done by marines. Their uniform and essentially military character render them well adapted to sentry and other guard duty, and, as they would be inexpert in general ship work, it seemed a natural arrangement to put the whole of that duty upon them. There were two other considerations, however, that I could not disregard. One was that, being alone intrusted with that duty, the marines would come to be looked upon as the police of the ship, a repellent and wholly erroneous idea which the officers of that fine corps would be among the first to reject. Men of the seaman branch, rated or acting as Masters at Arms, are the police force of the ship. The second, and a weighty, consideration was that the seamen were being deprived of opportunity for forming character and acquiring a sense of responsibility which

naturally inheres in duty of that kind, apart from becoming familiar with the manual and routine of a side branch of duty which was liable to come to them at any time in hostile operations on shore.

It seemed to me a simple problem in applied common sense. If the seaman suffered from being denied the exercise of an important duty, the way to remedy the situation was to put upon him the exercise of that duty. So I made a regulation that the guard duty should be shared by seamen and marines, and this was found to have a very good effect upon the self-confidence and bearing of the seamen, at the same time that it forestalled a natural antagonism at seeing members of a different service seemingly acting as the police.

In recent years there had come to be a great increase in the amount of cigarette smoking among the enlisted men, a matter that I viewed with some concern. My concern had not so much to do with any supposedly worse effects of that form of smoking as compared with other forms, but with the facility which led to an irrational amount of such smoking by immature youngsters and with the habits of slovenliness and carelessness seemingly engendered by it; the exercise of such habits being even more objectionable on board ship than elsewhere. An irresponsible boy or young man engaged in cleaning or some other job in any of the numerous passages or compartments of a ship would, while not under observation, light a cigarette; and upon hearing any one approach he would promptly throw the lighted cigarette or match away into any corner, preferably into some corner where rubbish would conceal it. There was some slight danger of fire in that; but what was worse was the slovenliness and litter of it.

It also helped to foster a contempt for law and regulation. I, therefore, forbade the sale of cigarettes in ships' stores, and the possession of matches by enlisted men. There was no ban upon tobacco and cigarette papers, but the amount of cigarette smoking and consequent slovenly habits became amply reduced, and this without creating hardship for older men who enjoyed rational smoking and were accustomed to the cigarette. If sumptuary laws could be framed to bring about that condition of affairs in various large or small communities where somewhat kindred evils are being combated by stringent laws, possibly such stringency of law might not be necessary. It is much the same in all mundane affairs; excessive number or stringency of laws rarely produces a desirable, or even the desired, effect. As a matter of fact, no doubt, in many instances, it is the excitement of the chase, rather than sober conviction, that moves the advocates of stringency.

As the autumn of 1909 approached, drills and all other work of the fleet had to be subordinated to participation in the Hudson-Fulton Celebration in New York, commemorating the three hundredth anniversary of the discovery of the Hudson River by Henry Hudson in 1609 and the one hundredth anniversary of the first successful application of steam to navigation upon that river by Robert Fulton in 1807. From September 25 to October 11 those two eminent events were commemorated, with a grandness of conception of which the Celebration Commission may well have felt proud after its four years of labor, and with a happy success of execution reflecting signal credit upon the State of New York and its sons.

Every civilized nation with which the United States held diplomatic relations had been invited to

send its representatives and every seaboard nation had been invited to send, in addition, one or more vessels of its Navy. Response was very general, though not many ships were sent. Our Naval display was naturally much the most imposing, comprising sixteen battleships, six armored cruisers, twelve torpedo craft, four submarines, and fifteen tenders and auxiliaries. But in the visiting fleets there were some very fine ships. The British squadron of four ships included the *Inflexible,* which was then the last word in the combination of battleship and cruiser, and was so beautifully modeled as to create a most misleading first impression as to her size and freeboard. Germany had four ships there, France three, and Argentina, Italy, Mexico, and the Netherlands, each one.

Apart from the military power inherent in the individual squadrons, the leading powers set great store by the superiority in rank of their flag officers, a feature in prestige that had not yet appealed to us. Germany sent her ranking Admiral, Grossadmiral Hans Ludwig Raimund von Koester, to which England responded by sending Admiral of the Fleet Sir Edward Hobart Seymour, who outranked him by a small margin. Sir Edward also had with him Rear Admiral F. T. Hamilton in immediate command of the squadron. The French squadron was commanded by Contre Amiral Jules Louis Marie Le Pord, who also outranked me. I was the junior flag officer present in chief command, although our fleet was so very much the most powerful. Those incongruities have come to be recognized by Congress since that time; and, with our national tendency to pass quickly from one extreme to another, when the time did become ripe for a change it came with a deluge that provided, besides an admiral for the Atlantic

Fleet, full admirals to command two other fleets consisting of a few cruisers and some gunboats, each with a vice admiral as second in command.

Those foreign admirals acted in every way possible to prevent any embarrassment arising from my peculiar position. Admiral Le Pord, indeed, performed an act of courtesy very pleasantly conceived that is worthy of special mention. When I brought our fleet of battleships up the river to the anchorage that had been assigned to us, he had already arrived with his squadron and we had to pass it on our way up. Upon approaching, being the junior, it came to me to salute him with thirteen guns, which he would return; but at the flash of my first gun his responded so instantly that the reports blended and the two salutes were made simultaneously.

Any account of the events that crowded upon each other in the prosecution of that Hudson-Fulton Celebration would be out of place in anything but a book devoted to it alone. The Celebration was not local, but was so arranged as to enlist the interest and participation of every community along the river from New York City to Troy and Cohoes. A recital of the events would include banquets, religious services, land and water parades of varied natures and aspects, cruises of replicas of Hudson's *Half Moon* and of Fulton's *Clermont*, commemorating exercises, illuminations and pyrotechnics, dedications, lectures, aquatic sports, choral society concerts, et cetera.

Besides the aquatic sports listed in the prepared program, I received from Admiral of the Fleet Seymour a pleasant personal note asking that he be "permitted to give a small cup as a prize for a boat race here among boats' crews of the United States men of war under your command in the Atlantic

Fleet—to remain as a very trifling memory of our visit here." That cup was an object of spirited competition.

On September 30, the Secretary of the Navy, Mr. Meyer, came to visit the naval assemblage in the *Mayflower,* and entertained the admirals and several prominent guests at a luncheon on board, the *Mayflower* standing up the river the while. Later she returned and passed by the entire fleet with the Secretary's flag flying at the main. The regulations provided that upon such an occasion the band of each ship should play a march, and one ship gave me the opportunity to point out pleasantly to the Secretary that he was "not the only pebble on the beach." While I was in Guam, the bandmaster of the Naval Station had composed a very spirited march which he named the "Governor Schroeder March." When I went to the *Virginia* afterwards I took the score with me, and it was played by the band whenever my leaving the ship or returning on board, officially, required a march to be played. When the *Mayflower* passed that old ship of mine on the day that I am speaking of, that ship's band struck up the "Governor Schroeder March."

The President of the Celebration Commission, General Stewart L. Woodford, and Major General Charles F. Roe commanding the National Guard of New York and Chairman of the Military Parade Committee, were both very desirous that the Navy should have the place of highest honor in the International Military Parade that was to take place on September 30, for the reason that the entire Celebration was primarily naval in its conception. In his desire to further that view, General Roe came on board the *Connecticut* to talk it over, his hope be-

ing that it would be possible to place the *Connecticut's* battalion as escort to the Grand Marshal leading the parade. While recognizing the naturalness and the courtesy of the idea, I realized the possible existence of certain jealousies and felt constrained to express doubts as to the advisability of the plan, and at General Roe's invitation I suggested an order of precedence that would be entirely acceptable to the Navy, which was this: The Governor of New York having given permission to the foreign troops to land on New York soil and the Commanding General of the National Guard being Grand Marshal of the Parade, a unit of State troops should form the escort; then would come the Landing Parties from the fleets of foreign navies, in the order of rank of the senior officers of the various foreign squadrons, independently of the rank of the officers commanding the individual Landing Parties; then the United States Army; then the United States Navy; then the Naval Militia and National Guard; and finally such other organizations as there might be, arranged in accordance with what General Roe would think best. The order of march was finally carried out exactly as suggested, and President Woodford and General Roe expressed themselves as greatly relieved and pleased with that solution. The parade was a very fine one. Our naval contingent seemed especially imposing because of its strength and the excellent bearing of the men—one regiment of marines, and four regiments of seamen, and a battalion of officers and men of the Revenue Cutter Service.

The official banquet in honor of the official guests was one of the most brilliant scenes of the kind ever seen in New York. The room selected for the occasion was decorated so as to produce the effect of a

palace finished in Delft China, frescoes and immense paintings being in harmony with the creative spirit of the occasion. Some nineteen hundred guests were seated, and the courses were designed to appeal to the eye as well as the palate; the postprandial exercises included addresses of welcome by Governor Hughes and Vice President Sherman, which were responded to by various distinguished foreign guests.

Banquets were also given in honor of the visitors by various societies representative of foreign nationalities as well as our own. Among them was a very handsome entertainment by the United British Societies in honor of Admiral of the Fleet Seymour and the officers of his squadron, to which Grand Admiral von Koester, Rear Admiral Le Pord, and I and other senior officers of squadrons were also invited, with a suitable number of officers. At the end of a notable dinner, Sir Edward, being called on, made the following felicitous address:

"The American Navy has been distinguished by the recent epoch-making voyage of the battleship fleet around the world. Such a thing could have been imagined before, but that it could be done was another matter entirely. The American Navy has shown that the voyage was not an impossibility.

"It is not difficult for an Englishman to find himself at home in America. It would only be necessary, if there were no other indication, to receive such a reception as this to prove that this is not an alien land. I see before me the flags of two nations,—England and the United States. I hope that the Societies which have honored us to-night will continue to constitute a powerful bond between the nations represented here."

I was then called on, and I was glad of the opportunity to respond in a vein similar to that of the distinguished guest of honor. The voyage around the world having been alluded to, I could say with immense pleasure that I had taken part in it, visiting the different children of that great country whose evening gun is heard around the world. And upon the termination of that cruise it was now a joy to foregather and carry on and on the glad refrain of "Peace on Earth, Good Will among the Nations." I then went on:

"Peace is one thing; good will is another. There is a saying in a certain small section of my dear, peace-loving country that the politest community in the world is the community where every man carries a gun. Well, it may be so. But it makes for a rather nervous kind of peace. How much better is that peace which rests upon good will!

"It is perhaps needless to point out what potent influence for good will is created by the residence in one country of subjects of another country, engaged in pursuits that create common interests. And when those subjects are banded together in Societies, their power for good is increased many fold; for those Societies are instinct with patriotism, a patriotism broad in its conception and practical in its achievement of binding closer and closer together those whose interests tally so pleasantly with their sympathies.

"Without resorting to cryptic utterances, and with the pleasant consciousness that I might perhaps say the same with regard to other nations, but with a particular consideration for the personal nationality of our hosts and of their guests of honor this eve-

ning, I have no hesitation in voicing the sentiment: If the armament of the world were dictated by the reciprocal attitude of Yankee and Briton, statesmen would have an easier time with their budgets and we should have instant opportunity to enjoy the blessings of a lasting peace, the victories of which, it is well said, are no less renowned than those of war."

When I took my seat, there was abundant indication that my fellow banqueters were at one with me in the sentiments expressed, an enthusiasm being evoked which was very heart-warming.

Upon the conclusion of the prescribed period of the Celebration, the fleet and the foreign squadrons slipped off and dispersed. There is no doubt that all carried away the pleasantest feelings of admiration for the way that the State and the City of New York had carried out that great enterprise.

In that autumn of 1909, the reorganization of the Navy Department went into effect, of which the essential feature was the creation of the four offices of Aids. The most immediate specific effect upon the fleet was the detachment of Admiral Wainwright from command of the Third Division and his assignment as Aid for Operations, creating a marked reversal of position with regard to the Commander in Chief. Whatever the merits of that entire system in all its details, the office of Aid for Operations became so solidly entrenched by that first incumbent that, although the system was in disfavor during the administration following Mr. Meyer's, that one office was retained and finally made statutory under the name Chief of Naval Operations—an excellent forward step. As may be said of all offices carrying important responsibility, the happiness of results will

always be dependent upon the selection of good men for the office and not too rapid rotation.

Before going south for the winter's work there was opportunity to inspect and send to Japan a loving cup, with pedestal, that had been procured by subscription in the fleet. The object served was expressed in the inscription, "Presented to the officers and men of the Imperial Japanese Navy by the officers and men of the United States Atlantic Fleet in grateful recognition of the generous courtesies received during their visit to Japan in October, nineteen hundred and eight." We had indeed ample cause for grateful recognition, and it was a very pleasant thought that a suitable expression of it had been made.

We were also able to send a cup of similar purpose to China for presentation to the Navy of that country in recognition of the courtesies received at Amoy. As only one squadron of the fleet made that visit, the number of subscribers was only one-half of the number that presented the token to Japan, which resulted in the gift being of a slightly less imposing nature; but it was a handsome cup and conveyed a very true expression of our appreciation.

With service in the West Indies specially in view, one of my earliest cares had been to provide a new summer uniform-of-the-day for the men of the fleet, which would greatly reduce discomfort in a tropical climate, while preserving a smart appearance. It consisted simply of removing the jumper, the men then remaining in white undershirts with short sleeves, that particular feature of sleeves alone making it decent and possible, of course. Boats' crews, and working parties and men about the decks, presented a good, natty appearance in that rig, besides

finding great comfort in it. The first suggestion in this direction had come from Captain Sharp, of the *Virginia,* some little time before; and the enlisted force of the Navy owe him hearty thanks, for, after it had been in use for a couple of years in the fleet, it was accepted by the Department for general use in the Navy.

During the winter months passed in the vicinity of Guantanamo Bay, several forms of physical and professional training could be taken up which were not practicable elsewhere, and advantage was taken of the opportunity to practice these besides the never-neglected gun and torpedo and mine practices.

The principal departure from usual routines was the landing of the regiment of seamen and marines from each division in turn for two weeks' experience in camp life, with instruction and practice on the rifle range. A good deal of work had to be done in clearing the rifle range and camp site, besides the baseball fields, and the fleet was sometimes put to it to provide the various kinds of labor needed. It was always managed, however. Upon one occasion a certain ship was called on for a working party of a certain size to include a man who could drive a mule. It transpired that the Executive of that ship scanned the Conduct Record Book and detailed the man who had been most frequently on the Report for profanity. They say he did very well.

It is sometimes contended that seamen should not be specially trained for military duty on shore, as battleships are not transports and their crews should not be diverted from battleship work. In support of this contention it is specifically objected that a heavy gun pointer, for instance, is too valuable a man in his personality and training to be exposed to dis-

ablement by sniping fire in a landing of essentially local importance. This is undoubtedly a question worthy of serious consideration in individual instances; but while giving due weight to theories we should envisage possible conditions. If the landing force that I had ready to put ashore in Havana in 1906 had had two weeks' training and practice at the butts that those regiments had at Guantanamo, there would have been reason for much greater confidence in the result, if actual hostilities had ensued. The essential character of the Navy is that of being "Johnny on the spot"; there is seldom time to wait for transports with expeditionary forces. Skill with the rifle and the fieldpiece is of an importance that cannot be denied; and the acquisition of it is also of distinct value in training gun pointers. During the two winters that I had the fleet in southern waters, several thousand men qualified as marksmen and as sharpshooters at the cost of some ten days, in each year, of relaxation from a somewhat monotonous routine on board ship. A few years later, at Vera Cruz, the value of such training became apparent. The competitions themselves also created enthusiastic and useful rivalries. I remember particularly the interest which centered one year on the firing by two midshipmen, Moses and Parker, the latter a grandson of my former captain, Ralph Chandler, of the *Swatara.* They were members of the rifle team of my flagship, the *Connecticut,* and when they went on the range they found their ship well down in score, but by brilliant and painstaking work they brought the score up and finally won the championship for her.

Apart from the rifle and field artillery practice and short periods of camp life, there were many

other drills and exercises, both afloat and ashore, that were of special utility for the great majority of our men who were not drawn from the seafaring class. For instance, during the two or three months in the two winters of 1909 and 1911, no less than six thousand men, who could not swim a stroke, became qualified in swimming fifty yards without assistance. The men enjoyed that immensely, too, as I happened to learn in an amusing way. The preliminary instruction was given on a convenient beach, and I noticed that the weekly reports from the ships showed small numbers qualifying, and they seemed to grow smaller all the time, which puzzled me, until I happened to land and visit that beach, when I received the impression that the men would not willingly give up that joyous splashing about by proving qualification in deep water. That evening I had a general signal sent out to the effect that it seemed dangerous in the extreme for boats to go ashore on Saturday afternoons so crowded with parties to watch the baseball games, and I suggested to captains to limit the baseball parties to those who had qualified in swimming. That signal naturally became known to every man in the fleet; and that week about one thousand men qualified.

There were also a few, so-called "old time," seamanship drills besides towing, that I considered quite important; and it was noticeable that the second or third time that a ship would, for instance, send out an anchor or kedge it would be done much more smartly than the first. As for the utility of that evolution: upon the occasion of the fleet anchoring off one of the towns of our Pacific Coast in 1908, the signal of execution to anchor was a trifle late which resulted in the *Virginia* anchoring in the kelp. When

the time approached to get under way it was found that the kelp had so choked the main injection valves that no water could be gotten to the condensers and the engines were immobilized. The ship having been practiced in it, a stream anchor was sent out in very short order and the ship was kedged out and ready to go ahead when the signal came. Apart, too, from any specific use of a drill, benefit is always derived from any exercise that has a tangible, visible result and is not unnecessarily laborious.

The proximity of the wooded wilderness made rambles or long hikes through it possible, and I often profited by the opportunity accompanied by members of the staff who were fond of that sort of thing. Sometimes we would catch sight of a deer bounding away through the brush, and at other times we would have the exhilaration of coming suddenly upon a thick-set snake of some kind, fully eight feet long, lying across the low branches of a tree, tense and ready.

Not all the time was passed in the bay. Besides the ships going out in pairs for towing practice, or for runs over the measured mile course in deep water to standardize screws, the fleet went out generally for a couple of days in each week for battle problems and exercises. The maneuvers, while in their infancy in those pioneer days, were made as realistic as possible and were certainly progressive, paving the way for more advanced work later. Sometimes also a division would go out and hunt for a swell for target practice and even try to create artificial rolls by having the crews sally back and forth across the decks. In time, that was given up as impracticable.

During that first visit of the fleet to Guantanamo Bay a quaint instance transpired of the revolvings

of the political wheel in that little, neighboring island republic. I was notified that on a certain day President Gomez of Cuba would arrive at Guantanamo City, up the bay, and it was intimated that a visit from me would be pleasantly regarded. So I went up to the city and was presented at a ceremonious reception, followed by a luncheon. The President impressed one as being a capable man, and a man of the world. He acknowledged my greeting in Spanish very pleasantly and, while his immediate personal following showed something in the way of aloofness, he seemed cordially disposed. And yet, after a pause in the conversation, he suddenly looked at me keenly for a moment and then asked, "Admiral, were you not in Havana about three years and a half ago?" That was the time of our intervention, when he was the political head of the insurrection and I was in command of the Naval Brigade charged with defending Havana against him. Although aware of his identity, I was not expecting that simple inquiry, but I managed to reply in a polite way, and as if not connecting it with any particular event, "Yes, Excellency, and, as it was the first time that I had been there in a great many years, it was pleasant to look over the old scenes." He smiled, with a half bow, and made no further allusion.

After leaving Guantanamo, during the target practices near the Southern Drill Ground, I had an opportunity to observe, in side-by-side comparison, the difference in the cleavage of the water by the successive classes of ships. In making a countermarch during an approach, each ship in succession passed the flagship at a few hundred yards' distance, going the opposite way at a good speed. The *Virginia* class apparently pushed the ocean before them; some of

the *Connecticut* class, a year or so younger, raised much less of a wave; and the *North Dakota* and the *Delaware* seemed to cut through like a knife. Probably the models have improved still more since then. At all events the evil spirit of the rambow has at last been exorcised. During half a century after the battle of Lissa in which mêlée, in the dense smoke, the *Re d'Italia* was fortuitously rammed and sunk, that obsession remained, despite the increase in battle ranges and the evolution of first brown and then smokeless powder, all of which tended to make ramming more and more impossible. Specially moved by the inconvenience caused by that protuberance in mooring and unmooring, and impressed by the unnecessary danger to our own ships in formation and to docks and piers, I had often voiced unofficial protest against it; but accepted standards die hard.

During the summer one week in July was devoted as usual to giving to the naval militias of the Atlantic seaboard and Great Lakes states such sea training as could be given in so limited a time; and it is no more than right to say that their enthusiastic interest greatly multiplied the result. I was able to adopt a plan of embarkation differing from what had been the previous practice, in that the various units were distributed among all the ships of the fleet, instead of being congregated in large numbers on board a few ships. In this way each militiaman could be assigned to some running mate, following him in all his duties, and supposedly becoming practiced in them. Separate rendezvous at sea were assigned with different ships coming from different state waters, the entire fleet then proceeding on a cruise around Bermuda and back. They were thus given a sight of that attractive-looking island, being also given steady

drills with observation and participation in tactical movements.

The dedication of the Pilgrims' Memorial Monument at Provincetown took place in August; for this event half of the fleet was present, the other half being detached for a function somewhere else. Having been present at the laying of the corner stone by President Roosevelt three years before, I was interested in the final exercises attending the dedication, at which President Taft was the leading orator, being followed by Senator Lodge, "the scholar statesman," and President Emeritus Charles W. Eliot of Harvard College, "the statesman scholar," and other noted speakers. The addresses were intellectual treats indeed—though one of them was, perhaps, a bit long.

We then proceeded with the program of torpedo and other practices for which the neighborhood of Provincetown is so well suited. I was glad to learn that, during the two seasons in these waters, I had succeeded in establishing pleasant relations with the Selectmen and the community in general. It came to be recognized that, with unremitting work through the week, there was no real harm in the relaxations of Saturday afternoon overflowing into Sunday afternoon.

Upon leaving Provincetown shortly after the ceremonies, we had a stiff bit of fog navigation on the passage to Newport. Leaving the harbor in the afternoon, the fleet had hardly worked its way round the Cape and shaped the course southward through the Georges Channel when it shut down, thick as pea soup. In anticipation, I had formed the fleet in Line of Squadrons (two columns widely separated) and had notified it that I would wireless the simple

changes of course that would be necessary. While doubling the Nantucket Shoals lightship, at about one o'clock, we had a glimpse of it, but that was all that we sighted. The next morning, approaching from the southeastward, we heard the Block Island fog signal, and, getting an approximate bearing, headed up for the Newport entrance. Then in time we caught the Point Judith siren, noted the bearing and estimated the distance, and checked the course. Then we heard Beaver Tail, and steered for Brenton's Reef lightship, hoping the fog would lift for us to go in, and it did clear just as we neared the lightship. Signal was immediately made to form column, and the fleet stood in past Castle Hill at the time that had been promised.

The month of September was available for target practices and battle exercises on the Southern Drill Ground, after which the ships dispersed for docking in preparation for a cruise to European waters which was to begin on November 1.

When the plan of that cruise to Europe was first broached, it seemed a good opportunity for initial steps looking to the resumption of friendly relations with our late adversary, Spain, and I suggested that the State Department be asked to have our Minister in Madrid ascertain if a visit by a division of the fleet to Spanish ports would be agreeable and advisable. The plan seemed to find favor in the Navy Department, but the appearance of cholera in some of the Mediterranean ports which had been included in the tentative itinerary made a complete change necessary, and I was directed to take the fleet to the English Channel.

The English Channel meant both English and French ports, and I soon settled upon the Thames and

Portland harbor on the English side, and Cherbourg and Brest in France. There being four divisions of ships, each could first visit an English or a French port and then exchange with one visiting a French or an English port. As there were to be about six weeks available for being in port, every ship would have three weeks in a port of each country. And it was so arranged. I took my own (First) division to Portland harbor (Weymouth), afterwards going to Cherbourg.

Begun in the middle of the nineteenth century to create from the open sea a harbor of refuge, the completion of Portland harbor in 1895 had been popularly regarded as a reply to fortified naval bases across the "Silver Streak," but that was before King Edward, the Peacemaker, had made his notable visits to Continental Europe, dropping his little drops of oil in the international machinery and laying the foundations of the Triple Entente that was to be the saving of civilization later. Fulfilling its first specific purpose, the harbor had become an imposing and useful creation where squadrons and fleets can lie in security. There is a limit, however, to its capacity, and I came near to causing some inconvenience, having arrived in the Channel with the fleet a little ahead of time. But on the last evening out a wireless message came from the American Naval Attaché in London, Captain Edward Simpson, saying that if we arrived on November 15, as I had notified him we would, instead of November 16, which was the day originally set, it would cause great inconvenience to the British Home Fleet, the whole of which was anchored in Portland harbor; but a division would put to sea to make room for us on November 16. So I took the First Division into Tor Bay, and then on the 16th

went on to Portland harbor, where we were very skillfully berthed by the English navigating officers.

There is much to commend the plan of giving to officers and men opportunity to vary the monotony of fleet life by visits to foreign ports; but we are perhaps not entirely conscious of the inconveniences we may cause. The countries visited naturally feel called upon to do a certain amount of entertaining of both officers and men, especially when the ships make the visits by divisions instead of singly. That entertainment is offered gladly; but it may be expected that in time the welcoming hosts may tire of it somewhat; at least, we may hesitate to continue offering opportunities for it. Also, as an instance, at the time of our visit to Weymouth, one entire division of the Home Fleet had to put to sea and remain away for six weeks to accommodate us as visitors. That, however, did not diminish at all the cordiality of welcome extended to us; and with their experience in such matters our sensible hosts were able to eliminate a great deal of formality, such as exchanges of cards, etc.

The naval force gathered there was very impressive in the number of dreadnoughts and armored and light cruisers. Admiral Sir William H. May was in command of the Home Fleet, with Vice Admiral Callaghan commanding the Second Squadron; Rear Admiral Colville had the First Cruiser Squadron, and another squadron was under the command of Rear Admiral Sturdee who, four years later, flying his flag from the battle cruiser *Invincible,* was Commander in Chief of the force that engaged and destroyed Admiral von Spee's squadron off the Falkland Islands.

I had occasion to go to London for a few days,

primarily to attend a dinner given by the American Ambassador Whitelaw Reid and Mrs. Reid, in the superb Dorchester House, which was the embassy at the time. There was some little embarrassment in making up that dinner, caused by my modest rank as compared with that of the British flag officers and other personages. In our own embassy, of course, there could be no divergence in my favor from strict rules of etiquette and precedence, and, as was pleasantly explained to us, in order to enable the Ambassador to take in Mrs. Schroeder, many noted persons whom it would have been a pleasure to meet, were not invited. After the dinner we went to a small dance given by the Duchess of Marlborough in Sunderland House.

An exceptionally enjoyable evening entertainment for myself and my wife was a small dinner with Lady Northcote in whose household in Sydney I had passed a week during the fleet's visit to Australia. Mrs. Schroeder had met and entertained them in Washington when they were on their way home. It was a very distinguished company assembled to meet us, including Lord Cromer, whose history had been the history of Egypt, and Lady Cromer, Count and Countess Clanwilliam, Alfred Austin, the Poet Laureate, and others. Lord Northcote was unavoidably absent making speeches in the tense and important elections that were being held, and Viscount St. Aldwin acted as host.

In the few days that we were in London, we "did" it quite thoroughly, a young sister of mine, long resident there, and her husband, Mr. Swinnerton-Dyer, being accomplished pilots to interesting scenes. Upon our return to Weymouth, on Portland harbor, several expeditions were managed into the neighbor-

ing country and villages, all of which we enjoyed despite a kind of weather to which Americans do not take kindly.

It is needless to say that the men of the fleet were not neglected. Besides the entertainments by the British blue-jackets, special trains and greatly diminished fares were arranged to take them to London, for which large numbers received special leaves of absence.

On December 8, the First Division exchanged ports with the division at Cherbourg, and we found several French battleships there, forming the Second Division under the command of Rear Admiral Berryer whose flagship was the *Bouvet*. The Maritime Prefect was Vice Admiral Kiesel, residing in the Prefecture. Official visits were quickly disposed of, and dates set for various dinners and receptions.

For certain reasons I had decided not to go to Paris personally. But our Ambassador, Mr. Robert Bacon, whom I knew very well, did me the honor to come to Cherbourg with the Naval Attaché, Captain F. L. Chapin, making a couple of days pass very pleasantly. It was by a cruel decree of fate that that eminent and attractive statesman and that exceptionally capable and forceful officer were both cut off not many years later at times when each was giving of his best to humanity and to his country.

The first dinner, which was at the Maritime Prefecture, was marked by a very sincere friendliness. Toward the close Vice Admiral Kiesel, after a few glowing words of welcome, proposed the health of myself and the American officers. Anticipating that this would be done, I had gathered my thoughts together for a reply, and, after thanking our host for

the kindly and generous sentiments expressed, I responded further as follows:

"C'est un grand plaisir que de se rappeler les occasions agréables où les officiers de nos deux marines se sont trouvés réunis. Il est malheureusement vrai qu'à notre époque on navigue à l'étranger moins souvent qu'autrefois. Mais, tout de même, la cordialité spontanée qui s'entrevoit partout où se trouvent réunis Français et Américains est la preuve de l'amitié qui existe actuellement et qui a existé depuis tant d'années entre eux. En vérité l'amitié que nous ressentons pour la France et pour la marine de France date de bien plus loin dans le passé que ne pourrait s'en souvenir aucun de ceux ici présents. L'âge de l'homme ne remonte pas à un siècle et un tiers, et c'est à cette distance que sont survenus les évènements dans lesquels ont poussé les racines virginales de notre affection d'enfant, de notre estime et de notre reconnaissance de nation en pleine maturité.

"Aussi dois-je ajouter, notre estime ne dépend pas uniquement de nos sentiments de reconnaissance. Parmi les diverses influences qui contribuent à fortifier et animer les membres d'un corps militaire il y a un certain orgueil à rappeler les hauts faits d'un peuple qui leur est venu en aide. Ayant su nous-memes développer bon nombre de hardis marins qui ont pourvu à ce que le renom de la marine des Etats-Unis ne tombe pas en discrédit, on peut dire que nous nous connaissons en réputations légitimes: or, messieurs, nous connaissons les Jean de Vienne, les Forbin, les Jean Bart, les Duguay-Trouin, Tourville, Duquesne, Château-Renault, La Bourdonnais, Bouvet, La Motte Picquet, Suffren, De Grasse, Jauréguí-

berry (que j'ai eu l'honneur de connaître—c'est le père que j'ai connu; et comme l'on dit, on en reconnait bien el manteau sur les épaules du fils), Courbet —enfin, messieurs, il faut que je m'arrête; la liste en est trop longue de ceux qui ont posé leur cachet dans les fastes de l'histoire; et je ne puis que m'incliner en silence devant le groupe brilliant de ceux qui portent toujours le harnais et ont la main sur la barre de la marine française.

"Sur ce, avec la bonne permission de votre Excellence, je voudrais porter un toast: Je propose à mes compatriotes et mes camarades de lever leurs coupes en honneur de M. le vice amiral Préfet Maritime, et de notre allié d'autrefois, notre ami d'aujourd'hui et de l'Savenir—la Marine de France!"

TRANSLATION: "It is a great pleasure to recall the pleasant occasions when officers of our two navies have foregathered. It is unfortunately true that in present times there is less foreign cruising than in days gone by. Yet, the spontaneous cordiality that prevails wherever Frenchmen and Americans come together is evidence of the friendship which exists now and has existed for so many years between them. In truth the friendship that we cherish for France and for the French Navy dates from much further back than could be recalled by any one here present. The age of man does not attain to a century and a third of time, and it is at that distance that the events took place in which sprouted the virgin roots of our affection as a child, of our esteem, and of our gratitude as a nation in full maturity.

"Also, I must add, our esteem does not depend solely upon our sentiments of gratitude. Among the

diverse influences which help to strengthen and animate the members of a military body, there is a certain pride in recalling the high deeds of a people who have come to their aid. Having been able, ourselves, to develop a goodly number of hardy seamen who saw to it that the name of the United States suffered no discredit, it may be said that we can recognize legitimate reputations. Now, sirs, we know the galaxy Jean de Vienne, Forbin, Jean Bart, Duguay-Trouin, Tourville, Duquesne, Château-Renault, La Bourdonnais, Bouvet, La Motte Picquet, Suffren, De Grasse, Jauréguiberry (whom I had the honor of knowing,—it is the father that I knew, and it seems that one can recognize his mantle upon the shoulders of the son), Courbet,—well, gentlemen, I must stop; the roll is too long of those who have put their stamp on the annals of history, and I can only bow in silence before the brilliant group of those who still wear the harness and have their hand at the helm of the French Navy.

"With this, with your Excellency's kind permission, I will offer a toast: I propose to my compatriots and my comrades that we raise our glasses in honor of the Vice Admiral, Maritime Prefect, and of our ally of long ago, our friend of to-day and of the future, the Navy of France."

The most sincere friend of France will not pretend to like the climate of that northwest coast in winter. There seemed to be incessant rains and semi-incessant gales. No doubt the zero weather of our New England Coast would seem even harder to people accustomed to the English Channel; and during our month and a half on the two shores of that waterway we did become

somewhat accustomed to what seemed so hard at first. My wife had taken the opportunity to come to Europe with two of our daughters, and we have recollections of some pleasant walks and drives with some of the officers in the country round about Cherbourg, being able to pick and choose the times for them. Each walk was with an object in the shape of a château, of which we saw the three that are most prominently known in that region—Martinvast, Tourlaville and Nacqueville, beautiful all of them, especially the last. The grounds appealed to us most strongly, however; those of Nacqueville lay in two valleys or great ravines, one of which opened out seaward in which direction we could look where not screened by the trees, and the natural streams formed pretty, natural cascades with ponds at different levels not ruined by any apparent artificiality. The châteaux themselves were also very handsome, although restored at various times within fifty years or more.

The second dinner in our honor was given by the Mayor and Assistant Mayors and Municipal Council, in a historic reception room in the Hotel de Ville, built in 1867 to receive the Empress Eugénie. It was at the time of that visit of the Empress that the Naval Academy Practice Squadron had anchored in the roads. I remembered it well, but did not know about the reception room until the Mayor mentioned it just before he got up to make his speech and in time for me to allude to it in mine. The *menu* was elaborate, and the fish and fowl were first brought on for inspection *au naturel*. The appearance of a large buck with head erect and branching antlers, borne upon the shoulders of four stalwart halberdiers, caused an outburst of applause.

When the coffee had been served the Mayor made an address of welcome and proposed the health of myself and the officers, which was drunk standing. In response to that I made this reply:

"Monsieur le Maire et Messieurs les Adjoints et membres du Conseil Municipal: j'ai à vous remercier de tout cœur non seulement du toast que vous avez eu la bonté de porter, mais aussi de la courtoisie qui s'est traduite par cette manifestation amicale.

"Dès notre arrivée dans ce port nous avons été véritablement comblés de toutes parts de politesses et de bontés dont nous vous savons le meilleur gré, sans que toutefois nous en soyons beaucoup étonnés, pour la raison que là où Français et Américains se trouvent réunis, on trouve toujours une cordialité réciproque qui ne laisse rien à désirer. Et, messieurs, il doit en être ainsi. En dehors du souvenir des évènements qui ont accompagné et facilité l'entrée des Etats-Unis dans la famille des nations, souvenir qui nous est très cher, ces deux grandes républiques sœurs possèdent en commun tout ce qui entraîne une sympathie mutuelle. Mais ce n'est pas seulement d'une similitude de situation politique que provient cette sympathie. Il y a mieux que cela. Il n'est qu'un mot par lequel puisse s'exprimer la source de cette sympathie; c'est l'amitié spontanée, franche, sincère.

"Monsieur le Maire, je puis vous assurer que la bonne ville de Cherbourg ne laisse pas d'accaparer une belle partie des bons sentiments qu'entretiennent vos visiteurs envers la France entière—à juste titre. Nous savons apprécier l'aspect attrayant de la ville et de ses alentours. Il n'y a certainement rien de plus joli que la vallée de la Divette, rien de plus

pittoresque que la montagne du Roule, rien de plus superbe que les travaux publics du port. Aussi je ne puis passer outre sans mentionner cette belle salle de banquets à laquelle je prends intérêt, parce que j'avais le plaisir d'être dans votre rade sur une petite escadre de voiliers en 1867 lors de la visite de l'Impératrice Eugénie, visite pour laquelle cette salle fut construite. Mais plus que tout cela, l'histoire nous apprend à admirer les beaux traits de caractère des habitants de Cherbourg.

"Chaque ville se vante à bon droit d'une chose ou d'une autre. Marseille a sa Cannebière; le Mont Saint Michel ses omelettes; Cherbourg—quant à Cherbourg, je dois avouer une chose: dès les premiers jours de mon arrivée, quand l'heure vient de prier le bon Dieu de nous donner le pain quotidien, il me prend toujours envie d'y ajouter la prière, 'et fais en sorte que ce soit du pain de Cherbourg!' Et voilà que maintenant je viens d'apprendre que l'excellence du pain à Cherbourg est due à la bravoure des habitants de la ville, bravoure grâce à laquelle ils ont su, il y a plus d'un siècle, résister héroiquement aux attaques d'un ennemi acharné, ce qui leur a valu le droit de prendre de l'eau de mer pour faire le pain sans crainte de frauder la gabelle! Il est évident que les Cherbourgeois ont toujours été des gens braves aussi bien que de braves gens; et, ils peuvent se vanter d'un pain délicieux!

"Quand on commence à faire l'éloge de Cherbourg on pourrait s'étendre indéfiniment; cela demanderait une éloquence dont je ne dispose pas. Donc, je me contente d'exprimer la vive reconnaissance que moi et mes camarades ressentons pour le bon accueil qu'on nous a fait. Nous en emporterons les meilleurs souvenirs. En foi de quoi, avec votre bonne per-

mission, je propose à mes camarades et à mes collègues de la Marine et de l'Armée de France, de boire, rubis sur l'ongle, à la santé de M. Le Maire, de MM. les Adjoints et membres du conseil municipal, et aux citoyens de la ville de Cherbourg."

Translation: "Mr. Mayor, Messrs. Deputies, and members of the Municipal Council: I have to thank you with my whole heart not only for the toast that you have had the goodness to offer but for the courtesy which was translated in that friendly manifestation.

"Since the day of our arrival in this port we have been quite overwhelmed on all sides by acts of politeness and goodness of which we are very appreciative, though at the same time we are not surprised for the reason that, where Frenchmen and Americans come together, there one always finds a cordiality that leaves nothing to be desired. Aside from the memory of events which accompanied and facilitated the entry of the United States into the family of nations, a memory which is very dear to us, these two great sister republics possess in common all that creates a mutual sympathy. But it is not only from a similitude in political situation that this sympathy emanates. There is better than that. There is but one word which can express this sympathy; it is friendship spontaneous, frank, sincere.

"Mr. Mayor, I may assure you that the good city of Cherbourg does not fail to hold a fine part of the good will that your visitors entertain for France entire, and with good reason. We can appreciate the attractive picture of the town and its surroundings. There is certainly nothing prettier than the valley of the

Divette, nothing more picturesque than the Mountain du Roule, nothing finer than the public works of the port. And I cannot pass on without speaking of this handsome banquet hall in which I take interest, because I was in your roadstead in a little squadron of sailing ships in 1867, at the time of the visit of the Empress Eugénie, for which occasion the hall was built. But beyond all that, history teaches us to admire the fine character traits of the people of Cherbourg.

"Every city prides itself, with good reason, on one thing or another. Marseille has her Cannebière; Mont St. Michel, its omelets; Cherbourg,—as for Cherbourg, I must confess one thing: since the first days of my arrival here, when the time has come each day to pray to the good God to give us our daily bread, the desire has always come to me to add the prayer "and arrange that it shall be the bread of Cherbourg!" And now I have just learned that the excellence of the bread of Cherbourg is due to the bravery of the inhabitants of the city, a bravery which, over a century ago, made them offer heroic resistance to the attacks of a determined enemy, and which thus won for them the right to draw water from the sea to make their bread without defrauding the customs. Evidently the Cherbourgeois have always been a brave as well as a worthy people; and they may boast of a delicious bread.

"When one undertakes to sing the praises of Cherbourg, one could continue indefinitely; that would demand an eloquence not at my command. So I will content myself with expressing the gratitude that my *confrères* and I feel for the greeting that has been given us. We shall carry away the pleasantest recollections of it. In token of which, with your good

permission, I propose to my comrades and to my colleagues of the Navy and the Army of France to drink, bottoms up, to the health of the Mayor, the Messrs. Deputies, and members of the Municipal Council, and the citizens of the city of Cherbourg."

The healths were drunk standing and, as I had suggested, *rubis sur l'ongle*—bottoms up.

In regard to the omelets that I alluded to: Mont St. Michel is a picturesque little place some sixty miles from Cherbourg, pretty to visit and renowned throughout the surrounding country for Mme. Foularde's wonderful omelets at her hostelry. If any one visits Mont St. Michel and admits not having eaten an omelet, he is told that he should go back without fail and eat one.

My reference to the use of sea water bore upon a curious and actual incident. From the very early days of taxation, apparently, it has been forbidden to use sea water in France for making bread, as it would evade the salt monopoly by the Government. But in partial recognition of the desperate defense maintained by Cherbourg against an English attack over a century ago, the right was conferred to draw sea water for that purpose. That is a form of financiering that would probably not be regarded with favor in America; but salt and tobacco monopolies are not infrequent elsewhere.

Those two local hits were most pleasantly received by that pleasantly disposed company of banqueters, the one about the bread of Cherbourg having a touchingly laughable sequel. Huge cakes were sent out the next morning, one for me and one for each of the ships, mine bearing a card with the message, "A monsieur l'amiral Schroeder. Témoignage de re-

spectueuse gratitude. Chambre Syndicale de la Boulangerie."

As had been done in England, special trains and reduced fares were arranged to take the men to Paris, and large liberty parties profited by them.

Take it all in all, we came away with a general feeling, I think, of having thoroughly enjoyed Cherbourg. I arranged a sea rendezvous off Brest, where all the divisions met on December 31 and proceeded in fleet company on a passage to Guantanamo Bay.

This was not to be a simple passage from port to port, but was to furnish material for a scouting problem to be carried out by a force of armored cruisers, scouts and destroyers, organized as the Fifth Division under the command of Rear Admiral Staunton. The object was to locate the fleet on the high seas and, by means of wireless telegraphy, report its approach. An advantage possessed by the defense, greater than would exist in actual war, was the knowledge of the fleet's destination, so that the net could be spread in the most favorable direction. But the drill, so to call it, would be none the less instructive in many essential points. The opportunity was first recognized by the Aid for Operations, when it was expected that the fleet would go to the Mediterranean, and I would have had a division of destroyers. I had laid all my plans to use those destroyers to counterscout with sectional charts and secret ciphers for them to wireless if they saw any of the enemy, when we could edge away and try to escape detection. But it was not considered advisable to bring those torpedo craft on the cruise that was finally decided upon, so all that could be done was to decide on the route, and do everything possible to avoid visual or electrical detection.

In this latter problem lay some of the essential benefits to be derived, as a closer consideration of actual conditions was required than was called for in academic studies. Resort was had to every expedient to keep the approach of the fleet from being known. The formation that seemed most compact was Line of Squadrons, with one thousand yards' interval between columns; ships were darkened at night, even the usual navigating lights being switched off and nothing showing but a small, screened steering light at the stern; methods of signaling at night in very restricted directions were extemporized, the same being adopted permanently later; no sounds, such as testing sirens or whistles, were permitted; and a rigid embargo was placed upon the wireless, except for listening, even testing sparks being stopped.

The shortest route to Cuba was, of course, the Great Circle, and manifestly the best chance to get through would be to act quickly. But the Great Circle route would take us through stormy head seas that would reduce the speed to such an extent that little or no advantage would be gained over a route farther east, where the weather conditions would be better. The deciding factor, however, was something different. The Great Circle route would take us fairly close to our own coast, and the scouting ships, starting eastward for their Scouting line on a certain day, would surely be in position near the coast by the time the fleet would get there; whereas the fleet might perhaps get past the eastern end of the line before the scouts had reached it. With this in view, I took the Great Circle route to near the Azores, and the Great Circle route from there to the Windward Passage, and, upon leaving the English Channel, I set a standard speed that I hoped would

be possible for the passage. Unfortunately, one of the ships developed an unexpectedly large coal consumption, and we had to reduce speed, as the rule of the game was that the fleet should be kept together. The direct result of that was that one morning at daybreak we made out one of the big cruisers on our port beam; it was a fact that this vessel and those near her had but recently arrived at their stations and, if we had been able to maintain the faster speed, we would have been over one hundred miles beyond that scouting line, with a free course until striking the inshore scouting line of destroyers.

With radio work developed as it was later, we probably could have prevented the scout that discovered us from communicating precise information of our whereabouts to the rest of the scouting divisions, though the electrical battle would have unmistakably betrayed that we were in touch somewhere and directional radio would have revealed the general direction. But with the comparatively primitive wireless telegraphy of that day, before the organizing as well as the invention of methods, there seemed to be little to be gained by trying rough methods of interference, such as telegraphing the Articles of War or the Nebular Hypothesis. Knowing the direction of the scouting line, the scouts to the westward, hearing the significant jumble, would know the direction and get word in about it. So nothing was attempted, and the Fifth Division Commander was left free to handle his scouts by wireless without interference, thus profiting by the practice for himself and his ships.

The rest of the winter and the early spring of 1911 were passed in the usual exercises and drills, favored by the conditions afforded by Guantanamo Bay, with

periodical battle exercises outside, and the athletic competitions between ships, divisions and squadrons, such as pulling and sailing boat races, track events, and baseball matches, besides the rifle competitions, all of which created a very spirited rivalry. It would be difficult to overestimate the importance of that bay in its bearing upon the efficiency of the fleet, furnishing, as it does, opportunity for everything from the most elementary training of young ordinary seamen to practice for young officers in watch and division duty, and for captains and admirals in command of ships, divisions and fleets.

It was with a sense of great regret that I brought the fleet north from there, realizing that my active work was coming to an end and that I should never return to those scenes. After the San Marcos firings, a month was passed in strenuous target practices, after which I was notified that I would be relieved of the command by Rear Admiral Hugo Osterhaus in June, prior to being placed on the retired list. For that purpose, I took the flagship to Narragansett Bay with the *Michigan* in company.

When the day came, it meant not only good-by to the fleet, with which I had been continuously associated for over five years in various capacities, but separation from the naval service to which I had given my best efforts during forty-seven years.

This was well understood by those about me and certainly nothing was left undone to veil the parting in a glory of friendly farewell. A wealth of kindly feeling was displayed that touched me very deeply. After the lowering of my flag and the breaking of that of my successor with the customary honors, I went below and put on mufti and bade good-by to my staff. Captain Rush and his officers were at the

gangway, and I found six warrant officers "tending the side" as side boys, and at the gangway ladder was the pulling barge, manned by twelve officers with the Executive Officer, Lieutenant Commander Luke McNamee in the coxswain's box. As it pulled away from the gangway, the crew of the ship gave three cheers and the band played "Auld Lang Syne," and then the "Governor Schroeder March." When we were well clear of the ship, a personal salute of thirteen guns was fired, while in the distance were heard three cheers from the *Michigan,* Captain Usher in command. Finally, upon reaching the boat landing, Lieutenant Commander McNamee shook out a flag that had been placed in the stern sheets for me to sit upon, and which proved to be a 4-starred full admiral's flag, handed it to me, and said, "Admiral, this flag was made for presentation to you by the officers of the ship."

* * * * * *

On the retired list, I looked forward with some dismay simply to watching the play and march of events and professional developments. But before many months had passed I was on duty, revising the tactical system and signal books, which kept me employed for about two years and a half. During six months of that time I was entitled to active duty pay, under the law, but during the remaining two years I was happy in having the occupation without compensation other than interest in the work. My former flag lieutenant, Lieutenant Commander White, was associated with me for a while, and afterwards Lieutenant Russell Willson who had been flag lieutenant of the Second Division of the fleet. It was an extensive work, as indicated by the length of time the reconstruction took; and it can probably be fairly

regarded as a suitable, modern foundation upon which to graft the ever-sprouting branches of present-day development and refinement.

One nonconfidential item in the new instructions became generally known and provoked some amused and amusing comment. It was the prescription changing the commands to be given to the steersman and using the words "right" and "left" in place, apparently, of the time-honored terms "starboard" and "port." To effect a change of course to port (left) the command had always been "Starboard!" (right), which command referred to a helm which was in use many years ago. In the past half century the helm had been entirely eliminated, and a steam or hydraulic or electric engine substituted, and no reason has existed of late years for commanding "Starboard!" when wishing to go to port, and the train of events attending the contradiction has not infrequently caused confusion bordering upon disaster.

With ships in formation, the officer of the deck would see a signal "Ships Left!" (for instance), and thereupon would give the command "Starboard!" (right). The steersman would then have to turn his wheel to port (left), and the pointer on the dial (representing the bygone helm) would move to starboard (right) and the ship's head would swing to port (left).

Simplification demanded that the command should be in keeping with the signal, and, by being applied to the actual rudder, instead of to a mythical helm, be in keeping with the rudder, the wheel and the movement of the ship. At the signal "Ships left!" the command should be "Left!"; the wheel or electric controller would then be turned to the left, the

pointer would move to the left, and the ship would turn to the left. That is what was prescribed.

Unfortunately, concurrent with the new procedure of giving a command in harmony with the desired result, was the necessity of using terms other than "starboard" and "port." All officers and men having been trained in the understanding that the command "Starboard!" meant to put the wheel to port, it would manifestly be dangerous to continue to use the same term with an opposite meaning. The only way out was to make a complete change and use the commands "Right!" and "Left!"; which have the further recommendation of being identical with the signals.

The same reasoning, of course, applies to single ships, whether men of war or merchantmen. There is no excuse for continuing a complex procedure that has had no reason since the disappearance of the helm which was originally the subject of the commands.

Within a year after my detachment from this duty came the news of the wanton sinking of the *Lusitania* and the drowning of over a hundred American men, women and children. I accompanied my family north to our little place in Jamestown, Rhode Island, but I took my uniforms with me, and went prepared for instant obedience to any order, as it did not occur to me that we might remain at peace. But it was a needless precaution. In the spring of 1917, when it was admitted that the country was being warred upon, I was invited by the Red Cross, and labored for several months as chairman of the packing committee of the District of Columbia chapter.

In the autumn, however, I was ordered to duty as Hydrographer to the Navy Department, releasing a

younger admiral for sea duty. Any humdrumness that may have been supposed to attach to the Hydrographic Office prior to the war was thoroughly dispelled then, when the very lack of recognition of its needs in the past imposed a heavy burden on its efforts to meet the expanded situation. The situation was fairly well met, however, and the office will probably never again be dependent upon such slender resources as in the previous years.

In the spring of 1919, when an active officer became available to relieve me, I was detached from all duty and again relegated to an inactive status, having completed over fifty years of actual duty. But before that, it happened that a small job was put upon me quite different from anything that I could have expected. A gentleman wrote to the Navy Department pointing out that in the spelling of Russian place names every department of the Government used its own system for transliterating Russian alphabet characters, which resulted in occasional confusion, and it was suggested that the United States Geographic Board, of which the Hydrographer was a member, be requested to take up the matter. I was requested to lay the matter before that Board, which I did, with the result that the Chairman of the Executive Committee, in a spirit of humor worthy of a better cause, moved that I be appointed a subcommittee of one to prepare a transliteration table for approval by the Board. It is needless to say the motion was carried without debate; and all my spare time during several months was devoted to studies in that new field.

The Geographic Board had, some years before, included in its announced departures from local usage the avoidance of the use of diacritic characters. On

the other hand, it was evident that to transcribe thirty-six characters of the Russian alphabet, with only twenty-six Latin characters available, would require one, or both, of two methods, namely, to use diacritical marks or to produce the extraneous characters by the employment of digraphs. The answer was evidently "compromise." I studied some half-dozen grammars and dictionaries, made out tentative tables which had to be modified when put to the test of actual application, and evolved a report containing a table that seemed to minimize objections—which was the best that could be hoped for. Several meetings and conferences were held, having in consultation Dr. Palmieri and Dr. Speek, philologists, representing the Department of the Treasury and the Library of Congress respectively, and finally the report was adopted without the dotting of an "i" or the crossing of a "t."

Since final relegation to the inactive Retired List, nothing has remained but to watch the parade of events and try to gauge their effects for good or bad. Comments upon them differ as radically now as at any time, showing divergences of thought so wide as seemingly to preclude belief in common aims. Common aims do exist, however. It is perhaps through differences of temperament more often than through differences in fundamental character that the community of aims becomes obscured.

The most impressive, and perhaps the most important, event of many years has been the enactment of a law providing for promotion of officers by selection. All plans to that end in the past had been strongly opposed by the great mass of officers who naturally saw in them opportunities for advancement of men primarily fortunate in the command of

political or social influence. But when this law put it almost entirely in the hands of the officers themselves, it seemed ideal and met with sincere and hearty approval. It seemed that for officers of our Navy to pass upon the merits of those who come after was to assure the advancement of the best, subject only to honest differences of opinion within more or less close limits.

The problem was attacked with an elaboration of method that was somewhat characteristic and which may have made the end less happily attainable. That the system has come to be regarded otherwise than with unqualified approval seems evident, if one may judge by the surprise expressed in some cases of selection and overslaughing. Popular surprise is not so reliable a criterion as the carefully arrived at decision of a two-thirds majority of a sworn board of officers who have passed a lifetime in close association with the service and who are, beyond all question, impelled primarily to a conscientious performance of a delicate duty. Still, it is unfortunate if the surprise assumes such proportions as to incite remarks indicating dissatisfaction and uncertainty.

The provision that the President (that is, the Secretary) shall have power to veto the recommendation concerning any officer has been suggested as responsible for some unexpected situations. However that may be, it is doubtful if that reservation of power can be withheld, though a rational substitute for it might be found in a provision for a court, duly defined, to consider any case that might arise wherein an officer commits a serious offense after being selected for promotion. It is understood that the vetoing power was inserted to cover any such contingency.

Admitting that doubt exists in some quarters, it is well to establish, first of all, whether or not remediable fault lies in some provisions, fundamental or subsidiary, of the law. What is the essential object of the law? Manifestly, it is to promote the efficiency of the Navy by advancing to the higher and more important commands those who are best qualified for those duties. A secondary consideration is the rewarding of those who have toiled faithfully, but surely, to attain the main object, this secondary consideration may well be lightly regarded. Human nature not being infallible, it is the part of wisdom to reduce to a minimum the considerations affecting a decision. With but the one paramount object in view, there is less danger of extraneous influences affecting that decision.

Early advancement of those who are believed to be best qualified for the higher duties acts with double effect, by giving to those who are chosen increased time to acquire experience and familiarity with the sense of responsibility and thus to develop their highest qualities and at the same time have them available. Indeed, this second effect may well be of greater value than the primary. Its importance is of greatest weight in flag rank and diminishingly so down the list, the essential result of the selection of others lying really in hastening them on to flag rank with its wholly different duties and increased authority. Not only is the selection of officers of lower grades of less importance, but the certainty of correct judgment decreases as the difference in rank increases between the members of the Board and the candidates. The Board, as at present constituted, does not know the men. It has been suggested that it is not necessary that the Board should know them,

as the Reports of Fitness are there. If the thing is to be decided solely by the Reports of Fitness, then a committee of clerks would do as well as experienced officers. A man's personality, not easily presented by written word, is an important factor in efficiency. Furthermore, Reports of Fitness should be studied with a knowledge of the temperaments of those who make them, as well as with competent appreciation of the greater or less value of the various qualities and abilities reported upon.

One evident danger in all problems of selection is that the members of the Board may be insensibly swayed by personal considerations in favor of, or antagonistic to, individual candidates. There is no more honorable body of men in the world than the officers of our Navy, nor any less likely to be swayed by personal feelings; so intentional favoritism is a negligible factor in the problem. To doubt our competence to handle promotion of our own men would be to cast aspersions wholly unwarrantable. Still, to guard against continuing effects of any insensible bias, it would be well for the successive selection boards to differ as far as convenient in their personnel from previous boards.

Another possibility, less vital perhaps, but of ill effect, is the tendency to too fine differentiation. To attempt to grade officers semiannually according to minute, comparative degrees of excellence would be hazardous as aiming at more than is humanly practicable or intended. If selection be restricted to those who have shown marked efficiency, and continued rejection made only in cases of marked and generally known inefficiency, the object will be surely attained and with service approval.

While the onus of correct interpretation and judg-

ment must be with the Board, it is manifestly important that the law and the departmental regulations governing the Board's action be so framed as to facilitate to the utmost its reaching just conclusions. This may be partly accomplished by bringing out service reputations, or by restricting the application of the principle, or both. A pitfall fatal to many earnest makers of laws lies in subordinating large principles to straightened logic; and in this particular problem we see a tendency to assume that, if a certain amount of selection is good, twice as much is better. No greater mistake could be made. Officers eligible, at least at the present time, for the grade of commander may well not have seen enough, or sufficiently varied, service to stamp them as possessed of any marked ability or character or lack of either after promotions incident to the war. More careful consideration and less erratic flow might result from limiting selections for that grade to a certain proportion of the vacancies to be filled, say one in three. This would, no doubt, hurt the feelings of those who, happening to be the first in the groups of three, might be jumped. But it would probably hurt less feelings than are being hurt now, and it would have a stabilizing effect, checking the tendency to too close differentiation.

Suggestions have been advanced looking to having each grade select the men to be advanced into its grade from the grade below. But certain pernicious effects upon morale might result from that; and there would probably be a lack of cognizance of certain important features, such as health, age as affecting remaining length of service, etc., besides the reduced sense of responsibility apt to be held by individual members of a very large Board. A

better plan, I think, would be to have recommendations made by all the officers of each grade to which promotions are to be made for the information of the Board of Admirals. This would bring into consideration service reputation—the soundest and safest guide.

These comments apply only to the line officers. With the staff corps it is different. The duties of a medical director or naval constructor or pay director are the same when he has the rank of rear admiral as when he has the rank of captain. It becomes, therefore, a matter entirely of reward, a very pleasing thing; but then consideration of claims becomes more involved and more elastic than when selection for a more advanced field is to be decided.

A remarkable piece of recent legislation, temporarily suspended, has been the enactment of a law imposing a sea service qualification prior to promotion. As officers must go to sea when ordered and cannot go unless ordered, this provision of law gives to the Secretary of the Navy power to bar any officer from promotion by the simple expedient of not allowing sea orders to be issued to him. It is hardly conceivable that, after enacting all the existing legislation bearing upon promotion, Congress can have intended to provide an avenue through which such legislation can be evaded and promotion left partly to the whim of a Secretary. Possibly the ill-considered object vaguely in view was to provide politicians with a defense against the pleadings of constituents for the exercise of influence to secure shore duty for their friends. That result is undoubtedly achieved; and so is the other.

Extended and, at times, close, observation of men, especially in the service, has tended to make me

group characteristics as exemplified in the two antagonistic attributes of earnestness and perfunctoriness.

In one of our Pacific coast ports, during the cruise of the fleet around the world, I received, in common with the other captains, no doubt, a note from a lady asking me to place upon an inclosed card, for her son, my signature together with any little sentiment that might occur to me. It came to me to write simply the few words expressing the attitude which, consciously or unconsciously, has always been my mainspring. In closing, I can do no better than to urge upon all young men to consider those words:

"Whatever you do, do with all your might."

THE END

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